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INTRODUCTION

THIS book is not intended to be comprehensive It excludes parts of cardiology in which progress has not been striking in recent years, and it has not been possible to include some subjects in which there has been considerable activity Some fields on the borders of cardiology have been included because their importance in heart disease has recently become apparent, for instance, assessment of pulmonary function and the role of the kidney and electrolyte changes in heart disease In general accounts of the development and use of technical methods are kept in a subsidiary place, for ideas have been regarded as more important (and more interesting) than techniques For the selection of subjects I must take the responsibility—and the blame if there are inclusions or omissions not to the reader's taste Overlapping of subject matter from one chapter to another has not been eliminated, provided the authors concerned have approached their common field from different points of view

To define trends of thought in a subject is not synonymous with free speculation upon the nature of future developments, but it does imply a careful consideration of the direction in which ideas have changed in the last decade, an evaluation of current unsolved problems, and some discussion of the methods available to solve them

as readily as they might be expressed verbally Nevertheless, I am most grateful to the authors for the way in which they have entered into the spirit of this book which is intended to represent the approach of some active investigators in several countries to certain of the current problems in cardiology I hope, and believe that their views will be interesting and stimulating to those who work on

Department of Cardiology,
University of Manchester
September 1960

A MORGAN JONES

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For me it has [illegible]
worths in the pre[illegible]
in the preliminar[illegible]
wide knowledge [illegible]
greatly appreciate

Department of Cardiology
University of Manchester
September 1960

A MORGAN JONES

CHAPTER 1

CARDIAC MUSCLE METABOLISM

RICHARD J BING

METHODS OF STUDY

METABOLISM of the heart may be studied in the intact organ *in situ* and in preparations *in vitro* The former can be accomplished by intubating the coronary sinus and measuring extraction of substrates by the heart muscle as well as the coronary flow[1] (Bing 1954) The method has the advantage that it can be carried out in the closed-chest animal and in humans However, it is not sensitive enough to reveal slight but none the less important alterations in intermediary metabolism, the coronary arterio-venous difference of a substrate merely indicates its net utilization and synthesis by the heart In addition, the method for determining the coronary [illegible]

[illegible] intubation of the coronary sinus, although feasible in most patients, cannot be accomplished in others due to the anatomical variations of the coronary sinus ostium or its surrounding structures

Work on isolated [illegible]

[illegible] customed to working with the organism as a whole, often wonders whether the biochemical events he is discovering on the isolated preparation bear any relationship to those in the normally functioning organism There is as yet not a single faultless method for studying cardiac metabolism It is possible that in the future there will be combinations of *in vitro* and *in vivo* techniques, possibly with the use of radioisotopes The eventual aim of these efforts must be directed towards a study of intermediary cardiac metabolism in the intact organism

METABOLISM OF THE NORMAL HEART

Most of the work on the metabolism of the normal heart has been carried out using coronary sinus catheterization It has been found that glucose, pyruvate, lactate amino acids, fatty acids and ketone bodies are utilized by the heart, and that utilization is, within limits, a function of the arterial concentration of these substrates (Bing 1954)

[1] Work supported by [illegible]
Medical Research Fund [illegible]
Committee and the Abt [illegible]

Utilization and extraction of fatty acids

Studies concerned with the usage and extraction of fatty acids by the intact heart in humans and dogs (Ballard and his colleagues, 1960) have been of particular interest It could be shown that free fatty acids (FFA) average about 6 per cent of the mean arterial level of total fatty acids (TFA) in the human, while in the dog this figure is approximately 3 per cent In the fasting human the mean myocardial extraction of FFA accounts for 42 per cent of the TFA extraction, while the esterified fraction makes up the other 58 per cent In the fasting dog the FFA fraction accounts for only 23 per cent of TFA extracted It is now established that in the fasting state most of the energy in the heart is derived from fat metabolism (Bing, 1954)

The concept has been developed that FFA compose the blood lipid fraction concerned primarily with the supply of fats to tissues for oxidative metabolism (Gordon and Cherkes, 1956, Dole, 1956) In line with this observation is the finding by Gordon and Cherkes that the heart can extract fairly large amounts of free fatty acids These results could be confirmed in the author's laboratory, but it was also demonstrated that even in the fasting state FFA account for less than one-half the myocardial extraction of TFA (Ballard and his colleagues 1960) In addition, the likelihood exists that a large fraction of TFA removed by the heart is not immediately oxidized to carbon dioxide and water, therefore, storage of fat by the heart is likely It is to be expected that an increase in the fatty acid fraction of the blood resulting from an intake of a fatty meal will not only increase the FFA concentration but also their utilization by the heart It has been shown that increase in plasma in FFA results in an elevation of the myocardial extraction of FFA by the heart with a slight rise in their myocardial usage (Ballard and his colleagues, 1960) The finding of an increase in FFA concentration in blood following ingestion of enough fat to cause lipaemia with a marked increase in optical density of blood is in contrast with the result obtained by Gordon and Cherkes (1956) and Dole (1956) who found that ingestion of fats to cause lipaemia had no effect on FFA concentration in plasma Apparently, as Fredrickson and Gordon have stated, changes in FFA concentration depend upon many factors including the rate of absorption, rate of transfer of triglycerides in blood, rate of hydrolysis of triglycerides, rate of utilization of FFA and the responsiveness of adipose tissue to exogenous fat (Fredrickson and Gordon, 1958)

Heparin, which mobilizes the enzyme lipoprotein lipase, results as to be expected, in both patients and dogs, in a decline in the arterial concentration of TFA and in a rise in the concentration of FFA This is accompanied by an increase in myocardial utilization in extraction of FFA (Ballard and his colleagues, 1960)

When the iodine number of the total fatty acid fraction of the plasma is determined in patients, it is seen that the values in coronary sinus blood consistently exceed those in arterial blood (Ballard and his colleagues, 1960) This suggests greater myocardial usage of saturated fatty acids Further identification of these saturated fatty acids has to await the results of more refined analytical techniques such as gas chromatography

In the post-operative state carbohydrates furnish the major portion of available energy of the heart, in the fasting state, however, utilization of fatty acids accounts for a major portion of the total usage of myocardial oxygen with an oxygen extraction ratio of 67 per cent compared to 35 per cent for carbohydrates (Bing,

1954) Table 1 illustrates the relative contribution of carbohydrates and non-carbohydrates to total myocardial oxygen usage in the post absorptive state in man

TABLE I

RELATIVE CONTRIBU
TO

Carbohydrate per cent		Non-carbohydrate per cent	
Glucose	17 90	Fatty acids	67 0
Pyruvate	0 54	Amino acids	5 6
Lactate	16 46	Ketones	4 3
TOTAL	34 90	TOTAL	76 9

Disadvantages of the heart lung preparation

Work published on the heart lung preparation usually does not refer to its imperfections and limitations frequently attempts are made to evaluate the basic importance of the findings without regard to the basic weakness of the method Studies on the isolated heart have strongly indicated the necessary direction of

tion from the rest of the body (Starling 1918) This defect is not present in the so-called metabolically supported heart that is in a preparation in which the blood flow to the heart muscle is from a donor animal But even here unphysiological conditions reduce considerably the advantages gained from these refinements in the technique

DISTURBANCES IN CARDIAC METABOLISM

Coronary sinus catheterization has failed to reveal any abnormalities in the extraction or the utilization of substrates in the majority of patients in failure with hypertensive arteriosclerotic or rheumatic valvular disease (Bing 1954) On the other hand there is ample reason to suspect that in anaemia anoxia hyperthyroidism and thiamin deficiency the cardiac metabolism is disturbed (Danforth and his colleagues 1960)

Anaemia

In anaemia
the coronary
be as great a
ments in the open chest dog have shown

1955) However, despite coronary vasodilatation, delivery of oxygen to the myocardium is inadequate

Anoxia

In anoxic heart muscle slices there occurs a rapid diminution of creatine phosphate, adenosine triphosphate and glycogen, while the level of hexosemonophosphate increases (Naegle and his colleagues, 1959) These changes demonstrate a high degree of glycolysis and suggest that under these conditions, phosphofructokinase may be the rate-limiting enzyme. The results agree with those obtained on the isolated skeletal muscle where, as a result of stimulation, hexosemonophosphate accumulates suggesting that the reaction glycogen to hexosemonophosphate occurs more rapidly than the reaction hexosemonophosphate to lactic acid, this points to phosphofructokinase as the rate-limiting step for lactic acid formation during contraction (Cori, 1956) As in heart muscle, so in skeletal muscle, the sum of the hexosemonophosphate and lactic acid formed during contraction closely corresponded to the loss of glycogen as found by direct determination (Cori, 1956) This illustrates that other intermediates of glycolysis do not accumulate to an appreciable extent Brief periods of anoxia as present during angina pectoris, as well as localized anoxia during myocardial infarction, lead to demonstrable glycolysis as evidenced by increased lactate levels in coronary sinus blood (Danforth and his colleagues, 1960)

Cardiac arrhythmias

Recent experiments in the author's laboratory dealing with disturbances in myocardial metabolism during cardiac arrhythmias have also revealed definitive changes in glycolytic pathways under these conditions (Klarwein and his colleagues) For example, as the ventricular rate increases to levels above 250 beats per minute, there is rapid glycogenolysis with an increase in myocardial levels of lactate and glucose-6-phosphate This is even more pronounced during ventricular fibrillation When the tension of the left ventricular muscle is increased by inflation of a balloon in the ascending aorta, with resulting elevation in left ventricular pressure of over 300 mm Hg, glycogenolysis and lactic acid formation are conspicuous, but the rise in glucose-6-phosphate is absent This result agrees with that reported in skeletal muscle, where the increase in glucose-6-phosphate was not related to the work of the muscle but was entirely dependent on the rate of stimulation (Cori, 1956)

Thiamine deficiency

In thiamine deficiency, the lack of co carboxylase results in biochemical disturbances which in turn produce the physiological manifestations of beri beri disease (Danforth and his colleagues, 1960) Thus, the heart muscle like other tissue is unable to utilize lactate and pyruvate normally Although in the experimental animal thiamine deficiency leads to low rates of coronary blood flow and high myocardial oxygen extraction, at larger flow the oxygen content of coronary sinus blood is elevated to a greater degree than expected, resulting in marked diminution of myocardial oxygen extraction This abnormal relationship between coronary blood flow and myocardial oxygen utilization suggests that deranged metabolism may result in insufficient energy production, which could well account for the

decreased ATP levels observed in the hearts of thiamine deficient rats, and may also explain the heart failure seen in beri beri In line with this functional basis of beri beri disease is the observation that no specific transitory or permanent alterations in heart muscle are demonstrable in this condition As stated by Rowlands and Vilter (1960), beri beri heart disease is largely the result of a reversible biochemical abnormality and is not characterized by specific pathological lesions.

Thyrotoxicosis

The basic underlying biochemical deficiency in thyrotoxicosis appears to be an uncoupling of oxidative phosphorylation The heart partakes in the overall increase

toxicosis It is likely that in the heart muscle, as in other tissues, more oxidation of substrate is required to produce the same amount of high energy phosphate Heart mitochondria are particularly susceptible to this effect of the hormone (Vitale, Nakamura and Hergsted, 1957)

Failure of the heart

Much work has been carried out during the last 20 years to explain the spontaneous failure of the isolated heart It has only recently been realized that although the dynamic events occurring in the isolated heart are identical to those observed in the failing heart *in vivo*, the reasons leading to failure are entirely different. It has now been demonstrated that one hour after separation of the heart from the

... significant In addition, studies on the mechanism of the failure of the isolated heart have led to the interesting finding that the catecholamine concentration in heart muscle has no bearing on the performance of the heart muscle ...

... curve of the heart shows again the presence of failure, the concentration of nor-adrenaline in heart muscle remains elevated Thus, stored nor-adrenaline does not affect myocardial contract...

The act on of ...

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... in the absence of any ... the heart, and suggests that the ... glycosides may have some effect on metabolic processes involved in energy production However, since much of this work is dependent on the collection

of $^{14}CO_2$ during the various stages of homogenization of frozen and deproteinized tissue, the validity of these data has yet to be established

Myocardial oxygen utilization

It has been stated that because of interconversion of foodstuffs and their possible storage, measurement of myocardial oxygen usage is a more reliable index of metabolic events than myocardial utilization of substrates Although this statement oversimplifies the situation, studies on myocardial oxygen consumption, particularly in the intact heart, have yielded valuable results It has been shown, for instance, that it is primarily the coronary flow which responds to the oxygen needs of the heart (Bing and Daley, 1951) Alterations in blood pressure, rather than cardiac output, result in increased myocardial uptake of oxygen through an increased coronary blood flow (Case and his colleagues, 1956, Lawrent and his colleagues, 1956) An increase in heart rate has similar effects, although tachycardia in paralleling coronary flow does not change myocardial oxygen consumption per beat (Maxwell and his colleagues, 1958) The heart also appears to be more efficient at slower than at faster rates The effect of a sudden increase in mean aortic pressure on myocardial oxygen consumption and coronary flow suggests that the work of the heart, or more specifically, the work it performs in overcoming the resistance of the arterioles, is one of the more important factors in the determination of its oxygen usage In addition to these dynamic factors there are others in which the demand of the heart for oxygen is regulated at the cellular level, myocardial anoxia, anaemia and thyrotoxicosis fall into this group It is true that in these conditions secondary alterations in cardiac work occur, but the main demand for oxygen originates within the cell itself Gorlin has used the ratio of myocardial oxygen consumption per second of systolic contraction to the work per minute to differentiate the influence of haemodynamic and non haemodynamic factors on myocardial oxygen consumption (Gorlin and his colleagues 1959) Regardless of where or how the primary demand for increased oxygen uptake originates, it is met by changes in aortic perfusion pressure in the duration of diastole and of systolic inflow time, and by alterations in coronary vascular resistance (Gorlin and his colleagues 1959) Consequently, drugs influencing coronary circulation can act primarily by changing cardiac work or by altering the cellular demands for oxygen Nitroglycerin for example doubles myocardial oxygen usage and coronary flow in normal individuals without changing left ventricular work (Gorlin and his colleagues 1959) As a result, left ventricular efficiency diminishes Apparently, the increase in myocardial oxygen consumption is the result of increased demands for oxygen at the cellular level

In patients with coronary heart disease, coronary blood flow and myocardial oxygen consumption are slightly increased at rest (Gorlin and his colleagues, 1959) This apparent paradox is probably the result of diminished distensibility of the larger coronary vessels Following administration of nitroglycerin coronary vascular resistance remains essentially fixed and both coronary flow and myocardial oxygen consumption decrease Possibly the coronary vascular bed is already maximally dilated and cannot respond by further dilatation Nitroglycerin has no effect on the increased force of contraction elicited by sympathomimetic amines (Darby and Aldinger, 1960) It does, however, diminish cardiac output and diastolic filling pressure Thus, it is possible that the beneficial effect of the drug in patients

with coronary heart disease is the result of a decrease in contractility of the heart rather than of relaxation of the coronary vascular tree (Gorlin and his colleagues, 1959)

CONCLUSION

It is considered by the author that in the future any investigation of cardiac metabolism must inevitably proceed towards an exploration of cellular organization and its relation to function This goal cannot be accomplished with any single technique but only by a combination of methods Prejudice for any one method will only retard not advance this aim

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of $^{14}CO_2$ during the various stages of homogenization of frozen and deproteinized tissue, the validity of these data has yet to be established

Myocardial oxygen utilization

It has been stated that because of interconversion of foodstuffs and their possible storage, measurement of myocardial oxygen usage is a more reliable index of metabolic events than myocardial utilization of substrates Although this statement oversimplifies the situation, studies on myocardial oxygen consumption, particularly in the intact heart, have yielded valuable results It has been shown, for instance, that it is primarily the coronary flow which responds to the oxygen needs of the heart (Bing and Daley, 1951) Alterations in blood pressure, rather than cardiac output, result in increased myocardial uptake of oxygen through an increased coronary blood flow (Case and his colleagues, 1956, Lawrent and his colleagues, 1956) An increase in heart rate has similar effects, although tachycardia in paralleling coronary flow does not change myocardial oxygen consumption per beat (Maxwell and his colleagues, 1958) The heart also appears to be more efficient at slower than at faster rates The effect of a sudden increase in mean aortic pressure on myocardial oxygen consumption and coronary flow suggests that the work of the heart, or more specifically, the work it performs in overcoming the resistance of the arterioles, is one of the more important factors in the determination of its oxygen usage In addition to these dynamic factors there are others in which the demand of the heart for oxygen is regulated at the cellular level, myocardial anoxia, anaemia and thyrotoxicosis fall into this group It is true that in these conditions secondary alterations in cardiac work occur, but the main demand for oxygen originates within the cell itself Gorlin has used the ratio of myocardial oxygen consumption per second of systolic contraction to the work per minute to differentiate the influence of haemodynamic and non haemodynamic factors on myocardial oxygen consumption (Gorlin and his colleagues, 1959) Regardless of where or how the primary demand for increased oxygen uptake originates, it is met by changes in aortic perfusion pressure, in the duration of diastole and of systolic inflow time, and by alterations in coronary vascular resistance (Gorlin and his colleagues, 1959) Consequently, drugs influencing coronary circulation can act primarily by changing cardiac work or by altering the cellular demands for oxygen Nitroglycerin, for example, doubles myocardial oxygen usage and coronary flow in normal individuals without changing left ventricular work (Gorlin and his colleagues, 1959) As a result, left ventricular efficiency diminishes Apparently, the increase in myocardial oxygen consumption is the result of increased demands for oxygen at the cellular level

In patients with coronary heart disease, coronary blood flow and myocardial oxygen consumption are slightly increased at rest (Gorlin and his colleagues, 1959) This apparent paradox is probably the result of diminished distensibility of the larger coronary vessels Following administration of nitroglycerin, coronary vascular resistance remains essentially fixed and both coronary flow and myocardial oxygen consumption decrease Possibly the coronary vascular bed is already maximally dilated and cannot respond by further dilatation Nitroglycerin has no effect on the increased force of contraction elicited by sympathomimetic amines (Darby and Aldinger, 1960) It does, however, diminish cardiac output and diastolic filling pressure Thus, it is possible that the beneficial effect of the drug in patients

CHAPTER 2

CIRCULATORY DYNAMICS AND THE LEFT HEART

E. P. SHARPEY-SCHAFER

IN THE PAST the electrocardiograph, the x-ray screen and the stethoscope were [illegible] tools of the heart specialist. Dynamic changes were largely disregarded, [illegible]

[illegible]

return route via the peripheral veins has become increasingly evident. Perhaps the simplest question that can be asked is how does the periphery know that the output of the left heart has changed? Since the system is closed, a second question follows how do peripheral changes affect the output of the left heart? In attempting an answer it is suggested that the nervous system is the main factor when rapid changes are being studied, while long-term changes may be influenced by hormones The picture is further complicated by the probability of afferent messages from the heart itself

METHODS

The use of the catheter by Cournand and Ranges (1941) to determine cardiac [illegible]

other dilution curve methods

[illegible]

o [illegible] output however rapidly they occur It is the only useful procedure available at the moment

Similar difficulties are found in the periphery. Methods in general use for measuring flow in internal organs such as the kidney and liver are too slow to show rapid changes, and calculations of vascular resistance based on flow and sphygmomanometer arterial pressures can often be criticized In limbs, flow measurement by plethysmography is rather quicker (five seconds) but it is essential that intra-arterial pressure should be recorded simultaneously, if changes in vascular resistance are to be calculated [illegible]

[illegible] Outlow, 1958)

Rowlands, D T, and Vilter, C F. (1960) "A Study of the Cardiac Stigmata in Prolonged Human Thiamine Deficiency." *Circulation*, 21, 4

Starling, E H (1918) *Lir*

Vitale, J J, Nakamura,
on Oxidative Phosph

Von Euler, U. S, and Udden, P. (1951) "Increase in Nor-Adrenalin Content of Organs after Administration of DOPA in the Cat." *Experientia*, 7, 465

takes about six seconds before peripheral constriction is demonstrable (Sharpey-Schafer, 1953, 1955, 1956a, Howarth and Sharpey Schafer, 1957) In other words, the system responds immediately to a burst of inhibitory impulses, but takes an appreciable time to respond to a decrease of afferent messages

Understanding of complex normal reflex responses is greatly helped by considering the purely mechanical behaviour of circulations whose reflexes have been interrupted While the efferent pathway can be cut by ganglionic blocking agents, consciousness is lost at low mean arterial pressure levels and many procedures become impractical Fortunately, there are a number of neurological diseases

output by tipping or the Valsalva manoeuvre (Fig 2) and raising the filling pressure by squatting produce simple mechanical changes in the circulation, so that over a range, mean arterial pressure bears an approximately linear relationship to the stroke output, for rate change is also abolished The normal reflex changes to the same procedures are now easier to interpret, and it can be shown that the degree of normal reflex constriction or dilatation bears a relationship to the degree of change in stroke output of the left ventricle The stroke output can be altered by other methods, thus mathematical problems raise the heart rate, stroke output and mean arterial pressure by an intact efferent pathway in patients with an afferent baroceptor block Since there are no circulatory reflexes, mean arterial pressure remains elevated for many seconds or even minutes In normal subjects, on the other hand, the same initial stimulus and mechanism is followed in a few seconds by reflex vasodilatation so that arterial pressure returns

heart failure are crude and cover only a proportion of the cases

In the majority of cases of heart failure there is no change in stroke output and no consequent reflex response when filling pressure is changed by the methods described above (Valsalva manoeuvre, tipping and squatting) Mean arterial pressure can be elevated by squatting without change in pulse pressure and no reflex response can be detected thus afford

g pressure causes an increase in stroke output and subsequent vasodilatation while increase of filling pressure diminishes stroke output and results in constriction

Pressure measurements can now be made in the left heart either via a broncho scope and the left atrium or by direct heart puncture Though often useful in establishing pathological anatomy for the surgeon, their value for functional studies is limited The best hope for the future lies in devising instruments for man similar to those used by Rushmer, Smith and Franklin (1959) in dogs After insertion of these devices at operation, it becomes possible to record a large number of measurements continuously in the unanaesthetized animal even under conditions of maximum exercise A small meter recording renal arterial flow continuously is but one of the attractive spanners that might disturb the works of a biochemical monopoly

BAROCEPTOR REFLEXES AND THE LEFT HEART

There is now much evidence that it is pulse pressure rather than mean pressure which governs peripheral vasomotor tone by the arterial baroceptor system The periphery thus responds to acute changes in the stroke output of the left ventricle The system has the following time relationships under resting conditions the vasomotor centre is inhibited by the normal pulse pressure to an extent which is represented by normal peripheral tone A single large beat or an imposed cough transient inhibits the vasomotor centre further and produces demonstrable vasodilatation (Fig 1) Diminution of stroke output and pulse pressure, however,

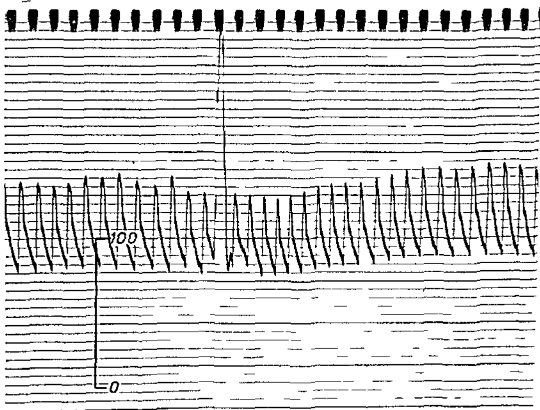
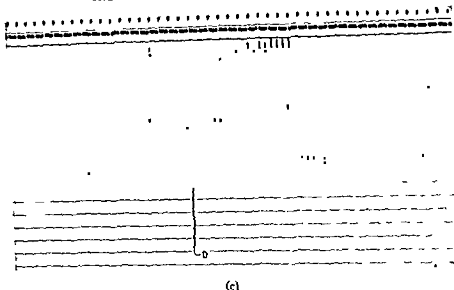


FIG 1 —Continuous arterial record showing vasodilatation after a single large cough transient Time marker in seconds Calibration in mm Hg



(c)

Fig 2—Continuous arterial records of Valsalva manoeuvre, (*a*) normal subject, (*b*) diabetic neuritis with afferent baroceptor block, (c) heart failure. Time marker in seconds. Calibration in mm Hg

indicate reflex venous constriction The pressure changes are small and artefacts correspondingly large, so that satisfactory results can only be obtained in a few trained subjects Another method is more useful and can be repeated at short intervals It depends on measuring the rate of venous pressure rise per unit of flow while blood is collecting in a forearm. The details of this method are published elsewhere (Sharpey-Schafer, 1960) The results confirm that the veins of the forearm show reflex constriction to procedures such as the Valsalva manoeuvre or tipping into the erect posture and that interruption of the afferent or efferent reflex pathw...

venou

change

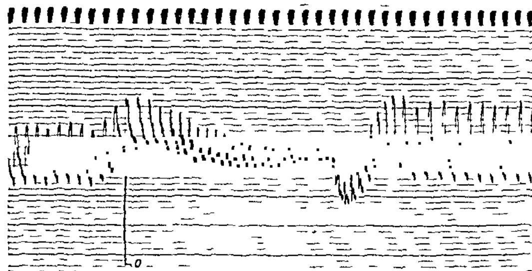
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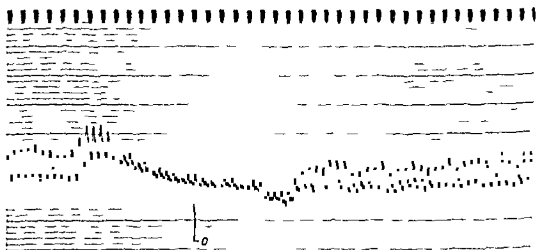
still exists in

AFFERENT REFLEX MECHANISMS FROM THE LEFT HEART

Receptor organs have been found in the left ...



(a)



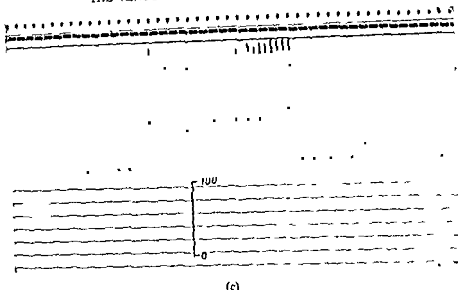
(b)

FIG 2 For legend see opposite

THE VENOUS SYSTEM AND THE LEFT HEART

It has long been tempting to believe that the peripheral venous system was not a flaccid structure but responded to reflex mechanisms The behaviour of the circulation in heart failure and after haemorrhage seems particularly suggestive Even better indirect evidence is provided by consideration of continuous arterial records in patients with a baroceptor block It will be seen in Fig 2 that, on release of the high intrathoracic pressure, pulse pressure only regains the control value after many seconds compared with the normal, a phenomenon that could be explained by venous constriction in the latter

More direct methods confirm this suggestion The isolated vein or segmental venous system, isolated by a high pressure cuff, show pressure changes which



(c)

Fig 2—Continuous arterial records of Valsalva manoeuvre, (a) normal subject, (b) diabetic neuritis with afferent baroceptor block, (c) heart failure. Time marker in seconds Calibration in mm Hg

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A curious confusion between venous return and effective cardiac venous pressure still exists in the minds of some and may stem from their exclusive interest in normal small domestic mammals In diseased man it is a simple matter to show that a falling venous return may be associated with a rising venous pressure or vice versa It is of value, too when measuring ...

AFFERENT REFLEX MECHANISMS FROM THE LEFT HEART

Receptor organs have been found in the left ...

pressure changes, it is difficult to determine what purpose such impulses effect when they reach the central nervous system. The evidence is, therefore, essentially indirect and to that degree interpretation is speculative.

Left heart failure

Dyspnoea in acute left heart failure is perhaps the best known example of an afferent reflex mechanism. Experimental and clinical evidence overwhelmingly point to the view that the respiratory drive is related to a rise of pressure in the left atrium and pulmonary veins. Cardiac output may be rising, falling or unchanged. Nor are changes in arterial gas tensions responsible; indeed pCO_2 may fall, such is the respiratory drive. The vicious circle mechanisms of left heart failure may involve other reflex responses from the low pressure system of left atrium and pulmonary veins. Measurement shows that as the attack develops peripheral constriction becomes intense; so intense that in chronic left heart failure gangrene occasionally develops, as in ball-valve thrombus of the left atrium and some cases of hypertensive failure. Continuous records show that constriction mediated through arterial baroceptors is not the sole mechanism, for it is present before stroke output and pulse pressure decrease. In normal subjects, too, rapid transfusion and a large rise of venous pressure cause constriction in the forearm (Sharpey-Schafer, 1952) in spite of an increase in arterial pulse pressure. The *common factor is a great rise of pressure in the low pressure system of the left heart.*

Using the method mentioned above, the venous system also participates in this constriction. Indeed the greatest increase in peripheral venous tone has been found in left heart failure, probably explaining, in part, the extraordinary difficulty of venesection in these patients.

The vicious circle mechanism of left heart failure is now seen as follows: initial mechanical rise of cardiac filling pressure (for example, supine posture or an unwise transfusion)—rise of pressure in the left low pressure system—reflex constriction (from left heart)—constriction of arteries with rise of mean arterial pressure, constriction of peripheral veins causing further rise of cardiac filling pressure, and the cycle repeated until:—decrease of stroke output—further constriction of arteries and veins mediated through arterial baroceptors. It is remarkable that spontaneous recovery ever occurs.

Dyspnoea is an additional factor. Experiments in subjects with long-cycle Cheyne-Stokes respiration and in cases of chronic failure hyperventilating voluntarily show that the venous pressure may rise with increased respiration. Intravenous morphine causes a sharp drop of venous pressure in an attack of left failure but is without effect in chronic failure when respiration is normal Ganglionic blocking agents interrupt the reflex pathway, breaking the vicious circle, and their value in attacks of left failure is well known All other methods of treatment are essentially directed to lowering the progressively rising venous pressure.

The faint reflex

The efferent pathway of the vaso-vagal faint reflex is hall-marked by acute vasodilatation of muscle vessels The afferent pathway has not been measured directly, but there is indirect evidence that the endings lie in the heart itself, probably the left ventricle. All known mechanisms which fire this reflex cause a

diminished amount of blood in the heart Thus emotion stimulates the contraction of the heart and at the same time filling pressure is reduced (Sharpey-Schafer, Hayter and Barlow, 1958)

The faint reflex does not occur in heart failure, in which it is impossible to empty the heart completely by ordinary methods It is suggested that the reflex is fired by large pressure transients which develop in a contracting ventricle with virtually no blood in it Such large pressure transients have been observed in the left ventricle of the dog, under similar conditions, and the consequent afferent volleys recorded (Henry and Gauer, 1950). There are, however, several features of the faint reflex which are still mysterious It is abolished by general anaesthesia. It is not known to occur in mammals other than man, and, perhaps the most difficult matter, it seems to involve a time factor Great diminution of stroke output (85 per cent decrease) over some seconds will not fire this reflex, but a more moderate decrease over several minutes will

Other reflex mechanisms

One of the most irritating questions that can be put to a renal worker is: "How does the kidney know that the heart has failed?" An attractive hypothesis suggests that one mechanism involves afferent nervous messages from the low pressure chambers of the left heart If the stimulus were pulsatile rather than due to changes in mean pressure, it would be possible to explain water retention in both heart failure and haemorrhage by a reduction in pulsation, though mean pressure is *high in the former* and low in the latter. The receptors, too, might be deceived by the large pulsations of mitral incompetence and thus explain some cases in which there is severe failure but no oedema Again, the curious water d...

...ation appears promising but unproven

Sooner or later the circulatory work... changes which are easily measured fo... acting, homeostatic mechanisms Thus ... of the adrenal is still very *obscure* Th... sensitive to changes in the output of the left ventricle, the afferent pathway is via the arterial baroceptors and the efferent by a hormonal mechanism (Bartter and his colleagues, 1959) Haemorrhage increases aldosterone production, but the purpose is not clear It is known, *however, that* bleeding an adrenalectomized subject is apt to produce disastrous hypotension, and it is possible, but still only speculative, that the adrenal plays some part in maintaining peripheral venous tone

SOME UNSOLVED HYPOTENSIVE STATES

Aortic stenosis

Syncope on effort in aortic stenosis ... and bradycardia After the attack ... It can be shown by measuring th...

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acceleration of the heart rate by atropine produces an increased systolic pressure gradient in the cavity of the left ventricle compared with the aorta It is possible that in fairly severe exercise systolic pressures in the left ventricle reach high levels and fire the vaso-vagal faint reflex Ventricular pressures under these difficult circumstances have not been measured and vital evidence on the state of muscle vessels during the attack is still missing

Myocardial infarction

Much confusion still exists on the circulatory changes which follow infarction In massive, nearly fatal lesions it is not unreasonable to suppose that cardiac output is so low that arterial pressure cannot be maintained by reflex constriction In less serious attacks acute hypotension with bradycardia may be observed, and in one such case there was evidence of vasodilatation of muscle vessels It is possible, therefore, that under some conditions the acute damage to ventricular muscle may fire the afferent endings of the faint reflex

Next, there is the problem of hypotension persisting for weeks after an infarct In myxoedema or mitral stenosis arterial pressure is easily maintained by reflex constriction in the face of minute outputs as low as 2 litres Cardiac output need not be reduced after infarction and measurement shows that the circulatory reflexes are intact It is possible that either some unknown reflex or a circulating substance from the infarcted area is responsible for resetting arterial pressure at a lower level Neither explanation is very satisfactory

Haemorrhage, diabetic coma and adrenal deficiency

Prolonged recurrent haemorrhage and successfully treated diabetic coma may be followed by hypotension lasting for weeks As in hypotension following infarction, little is known of the mechanism Cardiac output is normal or increased and circulatory reflexes are present A comparison suggests itself with the hypotension of adrenal deficiency in which circulatory reflexes are also present It appears that in all these conditions the main change is the setting of arterial pressure at a low level The problem is not unlike the one presented by hypertension where the circulation, set at a high arterial level, behaves normally in every other respect

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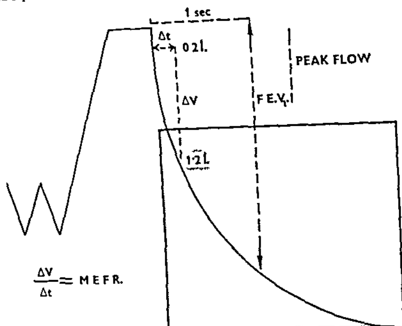
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Rhythm

ercise '

Resistance to airflow in the airways.—This is most easily assessed from recordings of forced expiratory vital capacity (F.E.V.) breaths on a rapid kymograph (Fig. 3). The



rate of airflow (slope of the record) over the lower two-thirds of such an expiration normally depends only on the airflow resistance, and is virtually independent of the

tidal volume of expired air

Assessment of diffusion

The difference between the alveolar and the systemic arterial pO_2 is considered to be due to an alveolar-end capillary pO_2 difference (the diffusion component), and an end

* Airmed Ltd., 16 Wigmore Street, London

CHAPTER 3

PULMONARY FUNCTION IN HEART DISEASE

JOHN BUTLER

IN THIS chapter pulmonary function is briefly reviewed in relation to heart disease. A separate consideration of heart or lung function is, of course, artificial in view of their integration in providing adequate gaseous exchange for the tissues. This unity of cardiorespiratory function will be illustrated by stressing the mechanical aspects of their performance.

TESTS OF CARDIORESPIRATORY FUNCTION

Several mechanisms are involved in conveying oxygen from the air to the tissues, and each may be considered to present a certain resistance to oxygen transfer at rest (Riley and Cournand, 1951) The difference in oxygen pressure (pO_2) across each of these functional resistances causes the corresponding oxygen uptake. There is a *ventilatory* resistance (which includes the effects of maldistribution of the

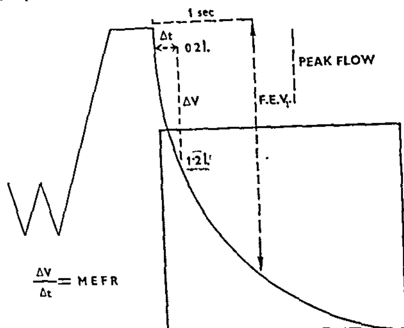
between the arterial blood and the tissues. This last is represented by the arterio-venous difference in pO_2 An analysis of these steps helps to decide which function is deranged

Assessment of ventilation

Vital capacity.—This is the greatest volume which can be expired after a maximum inspiration It depends on the balance between the elastic forces of the lungs and chest wall, and the pressures developed by the muscles in static respiratory effort at full

from the F.R.C. It seems to be …
the residual gas during expiration It is therefore mainly influenced by the airflow resistance

Resistance to airflow in the airways—This is most easily assessed from recordings of forced expiratory vital capacity (F E V) breaths on a rapid kymograph (Fig 3) The



peak flow determined with a peak flow meter (Wright*)

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The difference between the alveolar and the systemic arterial pO_2 is considered to be due to an alveolar-end capillary pO_2 difference (the diffusion component), and an end

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capillary-arterial pO_2 difference (shunt component) The shunt component is made up of true anatomical right to left venous admixture, and of blood which has perfused underventilated alveoli

Breathing room air, the patient may therefore have components in his arterial anoxaemia due to diffusion, alveolar shunts and true anatomical shunts For practical purposes, with a higher oxygen mixture (32–40 per cent) and exercise, any simple diffusion defect is eliminated by the high alveolar pO_2 Finally, 100 per cent O_2 at rest will also eliminate the alveolar shunt from under-oxygenated alveoli (Motley, 1958), leaving only the effect of the anatomical shunts

Since haemoglobin has an even greater affinity for carbon monoxide than it has for oxygen, the rate of CO transfer across the alveolar capillary resistance is limited

calculated The "steady state" methods depend on the continuous breathing of a CO

the steady

The rat

relatively

found in

measuring pulmonary capillary blood volume (Forster, 1957)

D_L for CO increases with body size and lung volume and decreases with age It is larger when lying supine and much greater on exercise Alveolar pO_2 influences it, probably by O_2 competition for the haemoglobin, and a raised alveolar pCO_2 has been found to increase D_L

Assessment of blood flow

The arterio mixed venous pO_2 difference depends on cardiac output, though the

MECHANICAL ASPECTS OF LUNG FUNCTION

Chest wall (thoracic cage and diaphragm)

Available evidence suggests that the elastic forces developed by the chest wall are approximately the same as those of the lungs, though both the elasticity and the frictional resistance of the chest wall are difficult to measure However, the static forces that the respiratory muscles can develop for respiratory manoeuvres (they may be greater in postural movements (Campbell, 1958)), can be fairly easily measured with a manometer at the mouth Expiratory force is greatest at full inspiration and inspiratory force is maximum at full expiration, these forces decrease with age

Lungs

Elastic resistance

The pressures developed by the elasticity of the lungs, when they are stretched to different volumes by the chest wall, may be recorded from the intrapleural space

The elastic pressure volume line of the lungs relates these pressures to the corresponding volumes (Fig 4) Oesophageal pressure change is more convenient to

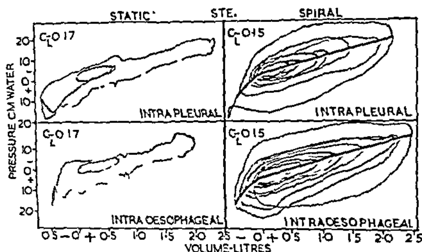


Fig 4 [illegible]

[illegible] ing these points

measure than intrapleural pressure change, which it closely reflects when [illegible]

[illegible] measured over the tidal volume A further difficulty is that C_L is dependent on the volume history of the lungs, being slightly higher after a deep inspiration (Butler, White and Arnott 1957) and [illegible]

[illegible] ticity of animal lungs [illegible] static measurements [illegible] them with saline, and [illegible] gone a long way towa [illegible]

explain the curvilinearity of the lung elastic line and, indeed, much of the "elastic retractive force of the lungs (Clements, Brown and Johnson 1958)

C_L is reduced by any lesion, such as chest wall weakness, which restricts lung expansion Alveolar closure is the likely mechanism This fall in compliance is, initially at least, reversible if the lungs can be properly inflated Similarly, there is normally a small decrease in C_L in the supine position associated with the reduction in the F R C As would be expected in an elastic system, C_L is directly related to the size of the lungs It is unaltered by age, though the actual retractive pressures at each lung volume are rather less in the aged

Frictional resistances

In addition to these elastic pressures, frictional resistances must be overcome in breathing These are greatest when movement is most rapid (usually about midway

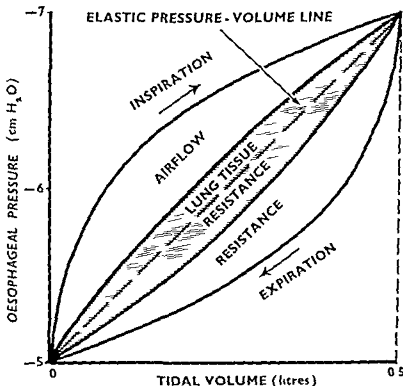


FIG 5 —Pressure volume diagram of lungs during a breath The fatness of the loop is representative of the frictional resistance The mechanical work (work = mean pressure × distance moved) ... the area of the ... fric ... lastic

between inspiration and expiration) and the additional force required changes the pressure-volume relations of the lungs from a single elastic line to a loop (Fig 5) The breadth of this loop at a constant breathing rate is proportional to the total

frictional resistance of the lung It is due mainly to the airflow resistance; the resistance due to tissue deformation normally accounts for only about one sixth of the total frictional resistance. The airflow resistance is a function of the size of the airways, varying with body size and the transmural pressure (mainly lung elastic pressure), to which they are exposed It is less during exercise, possibly because the airways are dilated by the increased elastic pressures at the higher lung volumes, and not significantly increased in old age.

The mechanical properties of the chest wall and lungs are such that (1) there is sufficient ventilation to maintain the same pO_2 gradient between air and alveolar gas, even at the greatly increased rates of oxygen uptake during exercise; (2) the ventilation is evenly distributed, (3) the work of breathing is low, and, (4) the capillary blood flow remains approximately constant throughout the respiratory cycle

Sufficiency of ventilation

The ventilatory equivalent for oxygen (litres of ventilation for 100 ml. O_2 uptake) does not alter during the hyperpnoea of increasing exercise. However, when exercise is very severe, over-ventilation in relation to O_2 uptake takes place. The cause of this is obscure

An appreciation of the limitations of the mechan

in

... the amount of CO_2 produced by the respiratory muscle ...

... abnormalities of the lungs or chest wall, without associated respiratory centre depression They found an impaired response to CO_2 inhalation in normal subjects who were breathing through external resistances sufficient to reduce their M B Cs to the levels found in patients with "respiratory centre depression" due to emphysema.

Evenness of distribution

Even distribution of ventilation depends on equal mechanical ...

different l ...

rec

... and bronchial muscle tone acting

inwards It is interesting that a degree of mechanical stability may exist in the lungs, for, when lung compliance decreases in the presence of units with narrowed airways, airway dilatation will follow, and the reverse will occur when compliance

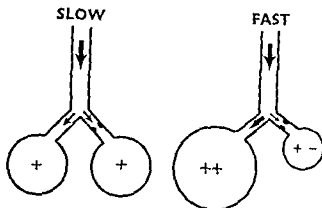


FIG 6 —Unequal time constants Circles represent alveoli, obstructed airway on the right of each figure
Slow breathing — equal distension
Rapid breathing — over distension of alveoli served by patent airway

increases The bronchial muscle may be useful in controlling the distribution of ventilation within the lungs Certain ventilatory responses to changes in posture support this hypothesis

Work of breathing

The total mechanical work done in breathing is difficult to measure, for it includes the work done in moving the chest wall So far the measurement of this chest-wall factor has not proved easy The mechanical work of moving the lungs, however, can be fairly simply derived from the pressure–volume loop of the lungs during breathing, if certain assumptions are made One way of assessing the total work of respiration is to measure the oxygen cost of breathing This can be done, though rather inaccurately because it is so low, by using a modified B M R machine during voluntary hyperventilation Comparison of the two methods shows general agreement in that an increase in the mechanical work of lung movement is associated with a higher oxygen cost of breathing (McGregor and Becklake, 1959)

Respiratory work depends on the volume of ventilation as well as on the

flow resistances to oxygen transfer They are also altered by the mechanical properties of the lungs themselves This is because the rate and lung volume at which breathing takes place are so adjusted that the required alveolar ventilation is accomplished with the minimum expense of mechanical work and oxygen consumption For instance, since a decrease in compliance increases elastic work in proportion to the square of the volume, the respiratory pattern is altered so that

the required alveolar ventilation is accomplished by shallower breathing at a more rapid rate, in keeping with the concept of minimal work expenditure This increased respiratory rate, however, causes a proportionately bigger dead space ventilation, so larger minute volumes are necessary for the same alveolar ventilation Recent work suggests that it is not, in fact, the rate of total mechanical work, but the average force required of the respiratory muscles which decides the optimal rate of breathing (Mead, 1959) Again, maldistribution of ventilation causes relatively over ventilated areas which increase the physiological dead space, and, therefore, the ventilatory volume necessary for the same alveolar ventilation

The oxygen cost of normal breathing is small—about 1 ml per L per minute or 2 per cent of resting oxygen consumption—but this increases at high minute volumes due to the rise in the mechanical work of lung movement for each litre of ventilation The efficiency of the respiratory muscles has been measured (rather unfairly) by relating the work performed against an unphysiological external resistance to the increase in oxygen uptake [illegible]

an [illegible]

bi [illegible]

larger proportion of the total oxygen uptake is used by the respiratory muscles Thus during exercise, an oxygen uptake of 2,000 ml per minute requires 50 L per minute vent lat on [illegible]

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Constancy of capillary blood flow

Recent work using radioactive CO_2 and CO in humans, has confirmed the suspicion engendered by the low level of the normal pulmonary artery pressure, that gravity has a profound influence on blood flow distribution in the lungs In fact the apex of the lung is probably almost bloodless in the upright position in normal man (West and Dollery, 1959) Similarly, when lying on one side, the blood flow in the dependent lung is greater than that in the upper lung

During inspiration the more negative intrapleural pressure increases the pressure gradient between intrathoracic and extrathoracic structures, venous return is augmented and right ventricular output rises Pulmonary artery [illegible] relative to the intra[illegible]

press [illegible]

outp [illegible]

It [illegible]

recent wo [illegible]

inwards It is interesting that a degree of mechanical stability may exist in the lungs, for, when lung compliance decreases in the presence of units with narrowed airways, airway dilatation will follow, and the reverse will occur when compliance

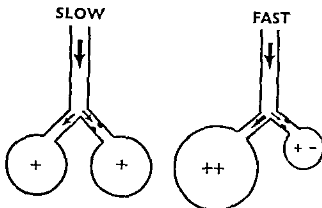


FIG 6—Unequal time constants Circles represent alveoli, obstructed airway on the right of each figure
Slow breathing — equal distension
Rapid breathing — over-distension of alveoli served by patent airway

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Respiratory work depends on the volume of ventilation as well as on the mechanical properties of the chest wall and lungs Although the metabolic demands for oxygen are of major importance in dictating the amount of ventilation, minute volumes are increased for unknown reasons when there are high diffusion or blood flow resistances to oxygen transfer They are also altered by the mechanical properties of the lungs themselves This is because the rate and lung volume at which breathing takes place are so adjusted that the required alveolar ventilation is accomplished with the minimum expense of mechanical work and oxygen consumption For instance, since a decrease in compliance increases elastic work in proportion to the square of the volume, the respiratory pattern is altered so that

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flow is unchanged during normal n [illegible]
[illegible] 1957) On the other hand the left ventricular output and the system [illegible]
during [illegible]
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It may be possible to interpret these changes during inspiration in the light of recent work First during inflation from low lung volumes the transpulmonary

vascular resistance, after an initial fall attributed by Burton (1950) to the unkinking of "gnarly", distorted capillaries, rises with inflation, a rise better correlated with lung elastic pressure than with lung volume Secondly, the lung blood volume alters with lung inflation, the direction of the overall change depending on the level of the intravascular pressure These changes in blood volume can be resolved into two vascular components (Howell, Permutt and Proctor, 1958) One, composed of the arteries and veins, expands and contains more blood, while the other, the capillaries, tends to contain less blood Direct observation of the lung capillaries has shown that they are flattened in inspiration Thirdly, Engelberg and Dubois (1957) found that the relative distensibility of arteries, capillaries and veins, during perfusion of the isolated rabbit's lung, was in the ratio of 1 1 3, but similar studies on the human lung are not yet available

One might, therefore, extend the suggestion of Marshall and Dubois (1957) that the increased output of the right heart in inspiration is contained within the arterial tree, the constant capillary flow may be maintained by the increased resistance in the pulmonary capillaries themselves as a result of their stretching This constant flow may then be largely held in the distensible pulmonary veins, which dilate due to the more negative intrapleural pressure, so the left ventricular output tends to fall With larger volume changes, an increase in capillary flow has been seen at the peak of inspiration, suggesting that the augmented right ventricular output overcomes the increase of vascular resistance under these circumstances

During normal expiration these effects are reversed No alteration is found in pulmonary capillary blood flow during expiration, even when breathing against a resistance The positive pressures in the alveoli, necessary to overcome airflow resistance during expiration, would not be expected to "compress ' the capillaries and reduce blood flow if surface tension effects are important causes of the retractive pressure of the lungs since these pressures are being mainly developed by the lining film of the alveoli mouthward of the capillaries

THE EFFECTS OF EXERCISE AND CHANGES IN INTRATHORACIC PRESSURE ON THE PULMONARY CIRCULATION

A considerable increase in pulmonary capillary blood flow, with greater pulsations of pressure and flow, accompanies the hyperpnoea of exercise However, pulmonary artery pressure rises little, in spite of the increase in right ventricular output, if exercise is sustained, the pressure tends to return to normal or even subnormal levels (Sancetta and his colleagues, 1957) Since vascular hysteresis—higher pressures on filling than on emptying—is such a marked feature in the pulmonary vasculature, it is possible that the increased pulse pressures found on exercise overcome ' critical opening pressures ' in the pulmonary capillaries (Burton 1950) which then open up to accommodate the increased flow, with virtually no overall change in vascular resistance Another mechanism might also be involved here It has been found that the vascular capacity at the same lung volume is greater when surface tension effects have been abolished (Frank, Radford and Whittenberger, 1959), which suggests that surface tension may play some part in regulating capillary volume in relation to ventilated space When the lung volume is small

hysteresis like effects suggest that a number of alveoli are close to their critical closing volume—the volume at which the surface tension of the alveolar film renders them unstable, as in the classical soap bubble experiment where the small bubble blows up the distended one, so they suddenly empty and the capillaries in their walls become distorted When the lung volume is increased on deep inspiration or exercise, and these alveoli enlarge—the surface tension diminishes with ageing of the film (Clements, Brown and Johnson, 1958)—the capillaries may be stretched open and available for blood flow However, such an effect, if it occurs, is probably of minor consequence at resting lung volumes, where hysteresis like changes are small The other possibility is that open capillaries dilate during exercise, though their small size and relatively low distensibility is rather against this The former mechanisms would allow capillary diameter and [illegible]

[illegible] flow and diffusing capacity in the upper parts of the lung, during exercise *in normal* subjects has now been confirmed (Dollery, 1959), *thus helping* to resolve the long controversy about why the diffusing capacity increases on exercise

It must be appreciated that changes in intrapleural pressure are directly transmitted to the pulmonary artery and veins, and cannot themselves alter transpulmonary vascular gradients Increasing the intrapleural and intra abdominal pressure at constant volume in the Valsalva manoeuvre causes a fall in pulmonary artery pressure and right ventricular output, which is reflected in the similar, well known changes in the systemic circuit These changes are probably due to the obstruction in the venous return to the right ventricle, no alteration in pulmonary vascular resistance need be invoked Breathing against a positive pressure differs from the Valsalva manoeuvre in that lung expansion occurs and, because this causes an increase in the elastic tension in the lung there is less rise in the intrapleural pressure to which the heart is exposed and, therefore, less initial rise in systemic venous pressure Depending on the pressure and the duration of its application, up to 500 ml of blood may be displaced from the trunk to the extremities As in the Valsalva the systemic arterial pressure rises with the rise in intrapleural pressure but would fall, with the reduction in venous return and cardiac output were peripheral vasoconstriction not to occur The effective filtration pressure across the system [illegible]
venous [illegible]
itself ar[illegible]
press[illegible]

[illegible] These factors will now be considered in relation to the heart failure which occurs in respiratory disease

HEART FAILURE IN RESPIRATORY DISEASE

The effects of anoxia and hypercapnia on the pulmonary circulation have been considered to be important in the pathogenesis of pulmonary heart disease Anoxia has been reported to cause a rise in pulmonary artery pressure (Motley and his

vascular resistance, after an initial fall attributed by Burton (1950) to the unkinking of "gnarly", distorted capillaries, rises with inflation, a rise better correlated with lung elastic pressure than with lung volume Secondly, the lung blood volume alters with lung inflation, the direction of the overall change depending on the level of the intravascular pressure These changes in blood volume can be resolved into two vascular components (Howell, Permutt and Proctor, 1958) One, composed of the arteries and veins, expands and contains more blood, while the other, the capillaries, tends to contain less blood Direct observation of the lung capillaries has shown that they are flattened in inspiration Thirdly, Engelberg and Dubois (1957) found that the relative distensibility of arteries, capillaries and veins, during perfusion of the isolated rabbit's lung, was in the ratio of 1 1 3, but similar studies on the human lung are not yet available

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resentative government Paine especially notes that in these constitutions "there is no such thing as the idea of a compact between the people on one side and the government on the other The compact was that of the people with each other, to produce and constitute a government "[29] President Washington was virtually the unanimous choice of the people "He accepted no pay as Commander in Chief, he accepts none as President of the United States " He is a "gentleman sufficient to put all those men called kings to shame "[30] How different from having as king a stadholder from Holland or a German elector! Thus, in reviewing the establishment of a representative democracy, Paine drew heavily upon personal observations and experiences

The *Rights of Man*, not always clearly or logically organized is in reality a great repository of materials concerned, as we have seen not simply with destruction of monarchy, but with bringing justice and happiness to men through representative government In this brief analysis of Paine s work two remaining points only can be touched on In the second part, he devotes several pages to a discussion of a possible alliance between England, France and America developing more fully the broader understanding among nations at which he had hinted in his *Letter to the Abbé Raynal* More significant is the humanitarian and pragmatic turn which Paine s thinking takes near the close of the work In both parts of the *Rights of Man* Paine has indicated how in countless ways the English people have been misruled—how the rich and privileged have been maintaining themselves chiefly at the expense of the poor Now Paine asks How can this injustice be abolished? And his answer is Only by liquidating the monarchy and reorganizing the financial resources of England With those monies which have been devoted so religiously to maintaining an aristocratic form of government material aid may be given to the poor and underprivileged *Public money,* he writes in the mood of humanitarianism with which the book ends ought to be touched with the most scrupulous consciousness of honor *It is not the* produce of riches only but of the hard earnings of labor and poverty It is drawn even from the bitterness of want and misery

[29] P 138 [30] P 140

Not a beggar passes, or perishes in the streets, whose mite is not in that mass [31] Paine finally makes specific proposals to help financially the poor and to make their living easier and happier A few of these proposals—two strikingly contemporary for Americans—may be noted

> Annuity of ten pounds each for life for all poor persons decayed tradesmen and others (supposed seventy thousand) of the age of sixty years
> Donation of twenty shillings each for fifty thousand births
> Donation of twenty shillings each for twenty thousand marriages
> Employment at all times for the casual poor in the cities of London and Westminster [32]

Both parts of the *Rights of Man* obtained a wide circulation, finding special popularity among those societies organized for the promotion of English liberties [33] Yet mobs, presumably inspired by the government burned Tom Paine in effigy and indulged in other demonstrations against him Finally in June of 1792 Paine was formally charged by the government with sedition, and a date was set for his trial Tradition says that the English poet William Blake warned Paine in September of his impending arrest In any case Paine immediately escaped to France During the summer, however he had penned a slashing denunciation of his prosecutors This pamphlet a *Letter Addressed to the Addressers on the Late Proclamation* was Paine's last stand against the English monarchy written under what was probably momentary danger of arrest If the *Rights of Man* had contained the seeds of sedition the "Address was sedition itself Here Paine takes a final thrust at Mr Burke's incoherent rhapsodies and distorted facts [34] and makes a plea for the freedom of the press

> If the press be free only to flatter Government, as Mr Burke has done and to cry up and extol what certain Court sycophants are pleased to call a glorious Constitution and not free to examine into its errors or abuses, or whether a Constitu

[31] Conway II 481 482 [32] Ibid., II, 5 2
[33] See *Rights of Man* note 2 p 180 [34] Conway III, 46

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[31] Conway II 481 482 [32] *Ibid* II 503
[33] See *Rights of Man* note 2 p 180 [34] Conway III 46

tion really exist or not, such freedom is no other than that of Spain Turkey, or Russia [35]

But perhaps the most important item in the 'Address is Paine's suggestion that "a national convention be called which would bring together the sense and opinions of every part of the nation fairly taken" [36] The English government could take no more

In bringing to a close Paine's attacks on the English monarchy it may be wise to observe that he sometimes failed fully to foresee the power which tradition has over the minds of men—a failure which he shared with the natural rights theorists in general He too often felt that if only men could be brought to a knowledge of right political principles they would at once throw off oppressive forms of government Unlike many an eighteenth century perfectionist who was waiting patiently for the millennium Paine desired and often expected immediate results In dedicating the second part of the *Rights of Man* to Lafayette Paine observed that he and his friend differed in but one point which did not concern the 'principles of government but time That which you suppose accomplishable in fourteen or fifteen years Paine triumphantly declares I may believe practicable in a much shorter period [37] This was plainly written before the Reign of Terror in France—before the rise to power of Napoleon Bonaparte Indeed Paine's optimism in the *Rights of Man* led him at moments to believe that most of the monarchies of Europe were on the very point of falling With an inconsistency after all so typical of the thinking of his age this man whose political theory could exhibit such marked pragmatic values could also assert I do not believe that monarchy and aristocracy will continue seven years longer in any of the enlightened countries in Europe [38] But then again this sentence was penned before the Reign of Terror!

IV

The years between Paine's going to France in 1787 and his confinement in the Luxembourg prison in 1793 must have been

[35] *Ibid* III 68 [36] *Ibid*, III 91 [37] *Ibid*, II 392
[38] *Ibid* II 398

an interlude punctuated by moments of enthusiasm and even happiness. During this period he made several trips between France and England. In France he had ample opportunity to talk with Jefferson, minister to that country until 1789. Soon Paine was eyewitness of the early events of the French Revolution. He was on terms of familiarity with Lafayette, who gave Paine the key to the *Bastille* to present to Washington. It is said that he even helped to draft the "Declaration of Rights." And so Paine, who loved always to be in the midst of history in the making, played his inconspicuous part in the French Revolution. After King Louis attempted flight in June, 1791, he wrote "A Republican Manifesto," probably issued as a broadside, denouncing the King's "abdication" and arousing the people to continued rebellion. Looking forward to the conclusion of the second part of the *Rights of Man*, to be published the following year, Paine presents his familiar argument for the abolition of monarchy when he speaks of "The thirty millions [of francs] which it costs to support a King in the éclat of stupid brutal luxury . . ."[1] Tradition has it that Paine and Duchatelet placarded the buildings of Paris with the "Manifesto" and even nailed a copy to the door of the building where the Assembly convened.

The second phase of his participation in the Revolution, beginning in 1792, after he had escaped from England, was fraught with grave consequences for Paine. Earlier in the same year the Assembly had bestowed upon him the title of citizen and he was later elected a representative to the Convention. In an "Address," now in his collected works, Paine accepted with gratitude these honors and reminded his "fellow citizens" that it had been his fate to bear a part "in the commencement and complete establishment of one revolution (I mean the Revolution of America)."[2] But Paine soon found himself enmeshed in French politics which, owing partly to his slender knowledge of the language, but perhaps even more to his ignorance of the French mind, he failed fully to understand. He was mainly allied to the Girondists, who some of Paine's biographers believe used him as a political tool. Among other conservative measures he advocated sparing the life

[1] Conway III. 1. [2] Ibid., III. 98.

of the King With the coming into power of Robespierre and the Jacobins, Paine shortly found himself in disfavor He now attended less frequently the meetings of the Convention, and by the end of 1793 he was imprisoned Gouverneur Morris, the American minister, who was one of Paine's bitter enemies, seems to have taken no measures to effect his release, though giving the impression to the American government that he had done all in his power In any case, Paine remained in prison for a period of ten months, suffering, during much of that time, from serious illness Finally James Monroe, the new ambassador, after much diplomatic maneuvering secured his release

For eighteen months Paine remained at Monroe's home endeavoring to regain his health In 1795 he tried once again to occupy his seat in the French National Convention, which was then considering the adoption of a constitution Among other things, *Paine disapproved of certain property restrictions which it was* proposed to place on suffrage In preparation for a speech he intended to be delivered for him at the Convention he wrote and apparently had distributed among the members a pamphlet entitled *Dissertation on First Principles of Government*, which was published in Paris in 1795 This work, which is reprinted entire in the present volume brings together in brief compass much of the essential political thinking of Paine In part a digest of some of his major ideas on government set forth in the *Rights of Man* Paine stresses what he calls 'the principle of equal rights,' [3] insisting that 'The right of voting for representatives is the primary right by which other rights are protected [4] With the Convention thus prepared in July 1795 he stood before the body while a secretary read his speech in French Paine here pointed out that the proposed limitations on suffrage violated the "Declaration of Rights No one is said to have spoken in support of Paine's plea, nor was his suggestion heeded in the final adoption of the Constitution He did not again appear before the Convention

These days spent in Monroe's home must have been sad for Paine Distressed by bodily disease he was manifestly disap-

[3] P 170 [4] P 165

pointed by the inadequate functioning of republicanism in France But all was far from right in America too Disappointment turned to disillusion and bitterness as he contemplated his imprisonment in the Luxembourg not as the act of a few political fanatics in France but owing mainly to the meanness and defection of one man in America—George Washington—to whose rescue he had come in the ninth *Crisis* and on whom he had lavished so much extravagant praise in print The "Letter to George Washington" (1796) is a difficult document for an American to read with complete objectivity Yet if we may for the moment look squarely at the facts it is impossible not to see that, in failing to investigate personally Paine s imprisonment Washington had been negligent in performing his duties as President of the United States The fact that Gouverneur Morris the minister to France, had given Washington the impression that all possible influence had been exerted to effect Paine s release does not excuse Washington since he was fully aware of the enmity between Morris and Paine But the letter though penned in a mood of bitterness sharply accentuated by ill health was plainly the product of indiscretion and tactlessness By the time this letter was penned America had broken politically into two sharply opposed parties—the Federalists and the Republicans (or Anti Federalists) Paine now found it necessary to align himself with the latter group yet as he observes early in the letter although he was opposed to certain things in the Federal Constitution he was among the first as we have seen to advocate the consolidating of the States into a Federal *Government* [5] Hence there was a real sense in which the term Anti Federalist could not justly be applied to him and he and Washington (whatever the latter might think) did not necessarily stand at opposite political poles The part I acted in the American Revolution Paine asserts is well known [6] and as we have amply shown Paine was right in his assertion that he had had America constantly in mind in all the political writing which he did abroad [7] He had never denied America and the Washington of politics [8] was responsible for Paine s undoing

[5] Conway III 214. [6] *Ibid.*, III 217 [7] *Ibid.*, III 216
[8] *Ibid* III 213

of the King With the coming into power of Robespierre and the Jacobins, Paine shortly found himself in disfavor He now attended less frequently the meetings of the Convention, and by the end of 1793 he was imprisoned Gouverneur Morris, the American minister, who was one of Paine's bitter enemies, seems to have taken no measures to effect his release, though giving the impression to the American government that he had done all in his power In any case, Paine remained in prison for a period of ten months, suffering, during much of that time, from serious illness Finally James Monroe, the new ambassador, after much diplomatic maneuvering, secured his release

For eighteen months Paine remained at Monroe's home endeavoring to regain his health In 1795 he tried once again to occupy his seat in the French National Convention, which was then considering the adoption of a constitution Among other things, Paine disapproved of certain property restrictions which it was proposed to place on suffrage In preparation for a speech he intended to be delivered for him at the Convention, he wrote and apparently had distributed among the members a pamphlet entitled *Dissertation on First Principles of Government*, which was published in Paris in 1795 This work, which is reprinted entire in the present volume, brings together in brief compass much of the essential political thinking of Paine In part a digest of some of his major ideas on government set forth in the *Rights of Man* Paine stresses what he calls 'the principle of equal rights,' [3] insisting that "The right of voting for representatives is the primary right by which other rights are protected' [4] With the Convention thus prepared, in July, 1795 he stood before the body while a secretary read his speech in French Paine here pointed out that the proposed limitations on suffrage violated the "Declaration of Rights No one is said to have spoken in support of Paine's plea, nor was his suggestion heeded in the final adoption of the Constitution He did not again appear before the Convention

These days spent in Monroe s home must have been sad for Paine Distressed by bodily disease he was manifestly disap-

[3] P 170 [4] P 165

pointed by the inadequate functioning of republicanism in France But all was far from right in America too Disappointment turned to disillusion and bitterness as he contemplated his imprisonment in the Luxembourg, not as the act of a few political fanatics in France, but owing mainly to the meanness and defection of one man in America—George Washington—to whose rescue he had come in the ninth *Crisis* and on whom he had lavished so much extravagant praise in print The "Letter to George Washington" (1796) is a difficult document for an American to read with complete objectivity Yet if we may for the moment look squarely at the facts [illegible]

that Gouverneur Morris the minister to France, had given Washington the impression that all possible influence had been exerted to effect Paine's release does not excuse Washington, since he was fully aware of the enmity between Morris and Paine But the *letter* though penned in a mood of bitterness sharply accentuated *by ill health* was plainly the product of indiscretion and tactlessness By the time this letter was penned America had broken politically into two sharply opposed parties—the Federalists and the Republicans (or Anti Federalists) Paine now found it necessary to align himself with the latter group yet as he observes *early in the letter* although he was opposed to certain *things in the Federal* Constitution he was among the first as we have seen to advocate the consolidating of *the States into a Federal Government* [5] Hence there was a real sense in which the term Anti Federalist could not justly be applied to him and he and Washington (whatever the latter might think) did not necessarily stand at opposite political poles The *part I acted* in the American Revolution Paine asserts "is well known" [6] and as we have amply shown Paine was right in his assertion that he had had America constantly in mind *in all the* political writing which he did abroad [7] *He had* never denied America, and the "Washington of politics" [8] was *responsible for* Paine's undoing

[5] Conway III, 214 [6] *Ibid.*, III 217 [7] *Ibid.*, III 216
[8] *Ibid.* III 213

Paine's denunciations in the letter presently became more personal "Elevated to the chair of the Presidency, you assumed the merit of everything to yourself, and the natural ingratitude of your constitution began to appear "[9] Surely "it was the duty of the Executive Department in America, to have made (at least) some inquiries about me, as soon as it heard of my imprisonment "[10]

After a lengthy attack on the Jay Treaty,[11] Paine concluded his letter *with* a burst of rhetorical passion for which many an American will find it difficult to forgive the author of *Common Sense*

And as to you Sir, treacherous in private friendship (for so you have been to me and that in the day of danger) and a hypocrite in public life the world will be puzzled to decide whether you are an apostate or an impostor whether you have abandoned good principles or whether you ever had any [12]

We now move with some relief to a saner work—indeed the last important pamphlet done by Paine abroad—*Agrarian Justice* (1797) Here he returns to the humanitarian vein which he had developed so effectively near the close of the *Rights of Man*—a plan for alleviating the condition of the poor of England The title of the work is at first misleading since nowhere does Paine advocate an agrarian economy The concept of agrarianism enters the work only in Paine s recognition that man in his original state had been close to the soil and had been dependent on the land for his existence It is a position not to be controverted he notes, "that the earth in its natural uncultivated state was and ever would have continued to be *the common property of the human race* In that state every man would have been born to property "[13] But the land for centuries has been slowly coming into the hands of the few who now possess estates that threaten

[9] *Ibid.*, III 217 [10] *Ibid* III 220

[11] The first treaty with England after the peace treaty of 1783 negotiated in 1795 by John Jay This treaty marked the beginning of regular diplomatic and commercial relations with Britain [12] *Ibid* III 252

[13] *Ibid* III 329

he well being of England Paine it must be noted is far from dvocating a return to nature 'It is always possible to go from he natural to the civilized state, but it is never possible to go from the civilized to the natural state' [14] The problem facing the poor lies in a complicated dispossession involved in the gradual development of civilization. How then can the dispossessed ever be given justice? Paine s answer is to place an inheritance tax on personal property and on land Part of his plan for the distribution among the poor of the monies thus acquired by the government Paine puts into the e words

> To create a national fund out of which there shall be paid to every person when arrived at the age of twenty-one years, the sum of fifteen pounds sterling as a compensation in part for the loss of his or her natural inheritance by the introduction of the system of landed property [15]

V

It seems proper to assume that Paine by the close of the eighteenth century recognized that he no longer had anything to contribute to the political progress of England and France His thoughts once more returned to America While Jefferson was still the Republican nominee Paine had written to Jefferson expressing the wish that he be given passage to America in a public vessel Upon his election Jefferson replied in a cordial letter offering Paine convoy in the sloop of war *Maryland* In addition the President replied that he was in hopes that Paine would find the country returned generally to sentiments worthy of former times In these it will be your glory to have steadily labored [illegible]

[illegible] prayer Later in 1801 Paine wrote to Jefferson congratulating him on his election though for the time being declining his invitation to use the *Maryland* In September of the following year however Paine arrived in Baltimore

[14] Ibid III 318 [15] Ibid III 331
[?] Conway III, 428

Because of his notorious letter to Washington and of his attacks on formal religion in the *Age of Reason* (1794 96), he returned for the most part a man hated and despised For a time he felt that even Jefferson was shunning him, but Jefferson was not long in assuring Paine of his friendship and admiration Besides Jefferson, Robert Fulton and John Wesley Jarvis, the painter in whose home Paine resided for five months, proved staunch friends

With his return to America Paine had no other course but to choose a political party and to fight as best he still could for the principles of that party His most significant political writing done during Jefferson s administration consisted of public letters eight in number, addressed "To the Citizens of the United States" (1802, 1803, 1805) Though somewhat rambling and incoherent these letters were obviously an attempt to strengthen Jefferson s hand in the difficult task which that statesman had taken upon himself in the face of an opposing political party Paine still contended that essentially he was a Federalist if by Federalist was "to be understood one who was for cementing the Union by a general government operating equally over all the States in all matters that embraced the common interest [2] And Paine has much to say about "Those who once figured as leaders under the assumed and fraudulent name of *federalism* [3] Indeed America had had her own ' Reign of Terror '— the latter end of the Washington Administration and the whole of that of Adams [4] These letters were unquestionably of assistance in paving the way for Jefferson's re election

In numerous other essays and letters Paine now sought to support the Republican cause Among these is A Challenge to the Federalists to Declare their Principles In this paper he asserts that the principles of the Republicans are well known and incontrovertible— 'that sovereignty resides in the great mass of the people *and that the persons they elect are the representatives of* that sovereignty itself But the Federalists have no principles and are mere *snarlers* or their principles are too bad to be

[2] *Ibid.*, III 386 [3] Philadelphia *Aurora* June 7 1805

[4] Conway III 392 Reference here is to John Adams second President of the United States (1796 1800)

told As to the inconsistencies contradictions and falsehoods of the Federal faction they are too numerous to be counted [5] Let the Federalists therefore declare their principles if they can! Just before his death Paine became involved in a political controversy with James Cheetham editor of the New York *American Citizen* a newspaper of strong Federalist not to say monarchical leanings A portion of this controversy centered about some of Paine's recent comments on the English monarchy made in the same spirit of Anglophobia characteristic of the *Rights of Man* By the time of his death Paine had come to identify Federalism with a devotion to England Cheetham undertook to answer these aspersions on England and Paine penned several replies quite in the manner of the eighteenth-century satirists sparing no offensive or coarse detail He describes Cheetham as an ugly tempered man who carries the evidence of it in the vulgarity and forbiddingness of his countenance—God has set a mark upon Cain [6] Cheetham finally retaliated with a scathing biography of Paine published the year of Paine's death

Alas for the Reign of Terror! Paine was never the same man after his imprisonment in the Luxembourg and the defection of Washington exaggerated beyond all normal proportions Born always to enjoy the very breath of liberty Paine had met with a doom so very wretched In writing *Common Sense,* he had asserted that he espoused no political party elsewhere he had declared himself a citizen of the world Now in old age he became unpleasantly partisan and was a man almost without a country Not even Jefferson's strong friendship could redeem him in the eyes of his countrymen Soured and disillusioned he went to the grave

Yet this must not be our final appraisal of Thomas Paine It is our hope to have demonstrated that despite the human frailties that attend ever upon genius Paine was one of those great humanitarian spirits who illuminate with rare intensity the age into which they are born Remember him then as the apostle of political liberty and the spokesman of the common man in America—in England—and in France!

[5] 1839 ed., II 460-461 [6] *Ibid* II 490 491

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NOTE ON THE TEXT

Common Sense was first published—anonymously—in Philadelphia, Pennsylvania, on January 10 1776, and reprinted almost immediately in other parts of the country Shortly after its first publication, Paine revised the text and published in the same year a corrected and enlarged version as, "A NEW EDITION, with several Additions in the Body of the Work" An "N B" on the title page stated also that "The New Edition here given increases the Work upwards of One Third"

The "New Edition must be accepted as the author's final version and has, therefore, been adopted for the present volume The text has been carefully collated with the copy of the "New Edition" in the possession of the New York Public Library and follows that text except for spelling and punctuation, which have been revised to conform to present-day American usage Obvious printer s errors have been corrected and the original version printed in footnotes

The other essays here reprinted and the passages quoted in the Introduction follow current editions As in the case of *Common Sense* spelling and punctuation have been modernized 'The American Crisis XIII here reprinted, is actually the fifteenth paper published at the end of the war The discrepancy in numbering is due to the fact that two of the preceding essays had been given titles— The Crisis Extraordinary" and "A Supernumerary Crisis respectively

Paine s own footnotes to the text included have been retained entire

For the convenience of the reader, the editor has contributed a number of appendix notes and footnotes, the latter indicated by brackets

The editor and the publishers wish to acknowledge the kind cooperation of the New York Public Library in making available for study and collation their collection of first editions of Paine's works

O P

COMMON SENSE

ADDRESSED TO

INHABITANTS OF AMERICA

[A NEW EDITION, 1776]

COMMON SENSE

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COMMON SENSE

INTRODUCTION

PERHAPS THE SENTIMENTS CONTAINED IN THE FOLLOWING pages are not *yet* sufficiently fashionable to procure them general favor a long habit of not thinking a thing *wrong* gives it a superficial appearance of being *right*, and raises at first a formidable outcry in defense of custom But the tumult soon subsides Time makes more converts than reason

As a long and violent abuse of power is generally the means of calling the right of it in question (and in matters, too, which might never have been thought of, had not the sufferers been aggravated into the inquiry) and as the King of England has undertaken in his *own right* to support the Parliament in what he calls *theirs, and as the good* people of this country are grievously oppressed by the combination they have an undoubted privilege to inquire into the pretensions of both and equally to reject the usurpation of either

In the following sheets the author has studiously avoided everything which is personal among ourselves Compliments as well as censure to individuals make no part thereof The wise and the worthy need not the triumph of a pamphlet and those whose sentiments are injudicious or unfriendly will cease *of themselves,* unless too much pains are bestowed upon their conversion

The cause of America is in a great measure the cause of all mankind Many circumstances have and will arise which are not local but universal and through which the principles of all lovers of mankind are affected and in the event of which their affections are interested The laying a country desolate with fire and sword, declaring war against the natural rights of all mankind, and extirpating the defenders thereof from the face of the earth is the concern of every man *to whom nature* has given the power of feeling of which class, regardless of party censure, is the

AUTHOR

P S * The publication of this new edition has been delayed, with a view of taking notice (had it been necessary) of any attempt to refute the doctrine of independence As no answer has yet appeared, it is now presumed that none will, the time needful for getting such a performance ready for the public being considerably past

Who the author of this production is, is wholly unnecessary to *the public, as the object for attention is the doctrine itself, not the man* Yet *it may not be unnecessary to say that he is unconnected* with any party and under no sort of influence, public or private but the influence of reason and principle

Philadelphia, February 14, 1776

COMMON SENSE

Of the Origin and Design of Government in General With Concise Remarks on the English Constitution

Some writers have so confounded society with government as to leave little or no distinction between them, whereas they are not only different but have different origins Society is produced by our wants, and government by our wickedness, the former promotes our happiness *positively* by uniting our affections, the latter *negatively* by restraining our vices The one encourages intercourse, the other creates distinctions The first is a patron, the last a punisher

Society in every state is a blessing but government even in its best state is but a necessary evil, in its worst state an intolerable one, for when we suffer or are exposed to the same miseries *by a government* which we might expect in a country *without government,* our calamity is heightened by reflecting that we furnish *the means by which we suffer Government, like dress is the badge* of lost innocence, the palaces of kings are built on the ruins of the bowers of paradise For were the impulses of conscience clear, uniform, and irresistibly obeyed, man would need no other lawgiver, but that not being the case he finds it necessary to

* [The following is Paine s postscript to the Preface in the New Edition]

surrender up a part of his property to furnish means for the protection of the rest, and this he is induced to do by the same prudence which in every other case advises him out of two evils to choose the least. Wherefore, security being the true design and end of government, it unanswerably follows that whatever form thereof appears most likely to ensure it to us, with the least expense and greatest benefit, is preferable to all others

In order to gain a clear and just idea of the design and end of government, let us suppose a small number of persons settled in some sequestered part of the earth, unconnected with the rest, they will then represent the first peopling of any country, or of the world In this state of natural liberty, society will be their first thought A thousand motives will excite them thereto, the strength of one man is so unequal to his wants and his mind so unfitted for perpetual solitude that he is soon obliged to seek assistance and relief of another who in his turn requires the same Four or five united would be able to raise a tolerable dwelling in the midst of a wilderness but one man might labor out the common period of life without accomplishing anything, when he had felled his timber, he could not remove it, nor erect it after it was removed hunger in the meantime would urge him from his work and every different want call h[illegible]
misfortune would be[illegible]
either would disable[illegible]
which he might rather be said to perish than to die

Thus necessity like a gravitating power, would soon form our newly arrived emigrants into society, the reciprocal blessings of which would supersede and render the obligations of law and government unnecessary while they remained perfectly just to each other but as nothing but Heaven is impregnable to vice, it will unavoidably happen that in proportion as they surmount the first difficulties of emigration which bound them together in a common cause they will begin to relax in their duty and attachment to each other, and this remissness will point out the necessity of establishing some form of government to supply the defect of moral virtue

Some convenient tree will afford them a statehouse, under the

branches of which the whole colony may assemble to deliberate on public matters It is more than probable that their first laws will have the title only of regulations and be enforced by no other penalty than public disesteem In this first parliament every man by natural right will have a seat

But as the colony increases the public concerns will increase likewise, and the distance at which the members may be separated will render it too inconvenient for all of them to meet on every occasion as at first, when their number was small their habitations near, and the public concerns few and trifling This will point out the convenience of their consenting to leave the legislative part to be managed by a select number chosen from the whole body, who are supposed to have the same concerns at stake which those have who appointed them and who will act in the same manner as the whole body would act were they present *If the colony continue increasing it will become necessary to augment* the number of representatives and that the interest of every part of the colony may be attended to it will be found best to divide the whole into convenient parts each part sending its proper number and that the *elected* might never form to themselves an interest separate from the *electors* prudence will point out the *propriety of having elections often* because *as the elected might* by that means return and mix again with the general body of the *electors* in a few months their fidelity to the public will be secured by the prudent reflection of not making a rod for themselves And as this frequent interchange will establish a common interest with every part of the community they will mutually and naturally support each other and on this (not on the unmeaning name of king) depends the *strength of government and the happiness of the governed*

Here then is the origin and rise of government namely a mode rendered necessary by the inability of moral virtue to govern the world here too is the design and end of government viz freedom and security And however our eyes may be dazzled with show or our ears deceived by sound however prejudice may warp our wills or interest darken our understanding the simple voice of nature and reason will say it is right

I draw my idea of the form of government from a principle in nature which no art can overturn, viz, that the more simple any-thing is, the less liable it is to be disordered and the easier repaired when disordered, and with this maxim in view I offer a few remarks on the so much boasted constitution of England That it was noble for the dark and slavish times in which it was erected is granted When the world was overrun with tyranny, the least remove therefrom was a glorious rescue But that it is imperfect, subject to convulsions and incapable of producing what it seems to promise is easily demonstrated

Absolute governments (though the disgrace of human nature) have this advantage with them that they are simple, if the people suffer, they know the head from which their suffering springs, know likewise the remedy and are not bewildered by a variety of causes and cures But the constitution of England is so exceedingly complex that the nation may suffer for years together without being able to discover in which part the fault lies, some will say in one and some in another, and every political physician will advise a different medicine

I know it is difficult to get over local or long-standing prejudices yet if we will suffer ourselves to examine the component *parts of the English* constitution, we shall find them to be the base *remains of two ancient* tyrannies, compounded with some new republican materials

First, the remains of monarchical tyranny in the person of the king

Secondly, the remains of aristocratical tyranny in the persons of the peers

Thirdly, the new republican materials *in the* persons of the Commons, on whose virtue depends the freedom of England

The two first by being hereditary, are independent of the people wherefore in a *constitutional sense*, they contribute nothing toward the freedom of the state

To say that the constitution of England is a *union* of three powers reciprocally *checking* each other, is farcical, either the words have no meaning or they are flat contradictions

To say that the Commons is a check upon the king presupposes two things

First, that the king is not to be trusted without being looked after, or, in other words, that a thirst for absolute power is the natural disease of monarchy

Secondly, that the Commons, by being appointed for that purpose, are either wiser or more worthy of confidence than the crown

But as the same constitution which gives the Commons a power to check the king by withholding the supplies gives afterward the king a power to check the Commons by empowering him to reject their other bills, it again supposes that the king is wiser than those whom it has already supposed to be wiser than him A mere absurdity!

There is something exceedingly ridiculous in the composition of monarchy, it first excludes a man from the means of information *yet empowers him to act in cases where the highest judgment* is required The state of a king shuts him from the world yet the business of a king requires him to know it thoroughly, wherefore the different parts, by unnaturally opposing and destroying each other, prove the whole character to be absurd and useless

Some writers have explained the English constitution thus the king, say they, is one the people another the peers are a house in behalf of the king the Commons in behalf of the people but this has all the distinctions of a house divided against itself, and though the expressions be pleasantly arranged yet when examined *they appear idle and ambiguous* and it will always happen that the nicest construction that words are capable of when applied to the description of something which either cannot exist or is too incomprehensible to be within the compass of description will be words of sound only and though they may amuse the ear they cannot inform the mind for this explanation includes a previous question viz, *how came the king by a power which the people are afraid to trust and always obliged to check?* Such a power could not be the gift of a wise people neither can any power *which needs checking* be from God yet the provision which the constitution makes supposes such a power to exist

But the provision is unequal to the task, the means either can not or will not accomplish the end, and the whole affair is a Felo-de-se, for as the greater weight will always carry up the less and as all the wheels of a machine are put in motion by one, it only remains to know which power in the constitution has the most weight for that will govern, and though the others, or a part of them may clog or, as the phrase is, check the rapidity of its motion, yet so long as they cannot stop it, their endeavors will be ineffectual The first moving power will at last have its way, and what it wants in speed is supplied by time

That the crown is this overbearing part in the English constitution needs not be mentioned, and that it derives its whole consequence merely from being the giver of places and pensions is self-evident wherefore though we have been wise enough to shut and lock a door against absolute monarchy, we at the same time have been foolish enough to put the crown in possession of the key

The prejudice of Englishmen in favor of their own government by king lords and Commons arises as much or more from national pride than reason Individuals are undoubtedly safer in England than in some other countries, but the will of the king is as much the law of the land in Britain as in France, with this difference that instead of proceeding directly from his mouth it is handed to the people under the more formidable shape of an act of Parliament For the fate of Charles the First [1] has only made kings more subtle—not more just

Wherefore laying aside all national pride and prejudice in favor of modes and forms the plain truth is that *it is wholly owing to the constitution of the people, and not to the constitution of the government*, that the crown is not as oppressive in England as in Turkey

An inquiry into the *constitutional errors* in the English form of government is at this time highly necessary, for as we are never in proper condition of doing justice to others while we continue under the infl [illegible]
we capable of doin [illegible]
any obstinate prej [illegible] as a man who is attached to a prostitute is unfitted to choose or judge of a wife so any pre-

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Wherefore laying aside all national pride and prejudice in favor of modes and forms the plain truth is that *it is wholly owing to the constitution of the people, and not to the constitution of the government* that the crown is not as oppressive in England as in Turkey

An inquiry into the *constitutional errors* in the English form of government is at this time highly necessary, for as we are never in proper condition of doing justice to others while we con tinue under the influence of some leading partiality, so neither are we capable of doing it to ourselves while we remain fettered by any obstinate prejudice And as a man who is attached to a prostitute is unfitted to choose or judge of a wife so any pre

possession in favor of a rotten constitution of government will disable us from discerning a good one

Of Monarchy and Hereditary Succession

Mankind being originally equals in the order of creation the equality could only be destroyed by some subsequent circum stance, the distinctions of rich and poor may in a great measure be accounted for, and that without having recourse to the harsh ill sounding names of oppression and avarice Oppression is often the *consequence* but seldom or never the *means* of riches, and though avarice will preserve a man from being necessitously poor it generally makes him too timorous to be wealthy

But there is another and greater distinction for which no truly natural or religious reason can be assigned, and that is the dis tinction of men into kings and subjects Male and female are the distinctions of nature, good and bad the distinctions of heaven but how a race of men came into the world so exalted above the rest, and distinguished like some new species, is worth inquiring into, and whether they are the means of happiness or of misery to mankind

In the early ages of the world according to the scripture chro nology, there were no kings, the consequence of which was there were no wars, it is the pride of kings which throws mankind into confusion Holland, without a king has enjoyed more peace for this last century than any of the monarchical governments in Europe Antiquity favors the same remark, for the quiet and rural lives of the first patriarchs have a happy something in them which vanishes when we come to the history of Jewish royalty

Government by kings was first introduced into the world by the heathens, from whom the children of Israel copied the custom It was the most prosperous invention the devil ever set on foot for the promotion of idolatry The heathens paid divine honors to their deceased kings, and the Christian world has improved on the plan by doing the same to their living ones How impious is the title of sacred majesty applied to a worm, who in the midst of his splendor is crumbling into dust!

As the exalting one man so greatly above the rest cannot be justified on the equal rights of nature, so neither can it be defended on the authority of scripture, for the will of the Almighty, as declared by Gideon and the prophet Samuel, expressly disapproves of government by kings All antimonarchical parts of scripture have been very smoothly glossed over in monarchical governments, but they undoubtedly merit the attention of countries which have their governments yet to form "Render unto Caesar the things which are Caesar's"[2] is the scripture doctrine of courts, yet it is no support of monarchical government, for the Jews at that time were without a king and in a state of vassalage to the Romans

Near three thousand years passed away, from the Mosaic account of the creation, till the Jews under a national delusion requested a king Till then their form of government (except in extraordinary cases where the Almighty interposed) was a kind of republic, administered by a judge and the elders of the tribes Kings they had none, and it was held sinful to acknowledge any being under that title but the Lord of Hosts And when a man seriously reflects on the idolatrous homage which is paid to the persons of kings, he need not wonder that the Almighty, ever jealous of his honor, should disapprove of a form of government which so impiously invades the prerogative of heaven

Monarchy is ranked in scripture as one of the sins of the Jews, for which a curse in reserve is denounced against them The history of that transaction is worth attending to

The children of Israel being oppressed by the Midianites, Gideon[3] marched against them with a small army, and victory through the divine interposition decided in his favor The Jews, elate with success and attributing it to the generalship of Gideon, proposed making him a king, saying, "Rule thou over us, thou and thy son and thy son's son' Here was temptation in its fullest extent—not a kingdom only, but a hereditary one—but Gideon, in the piety of his soul replied, I will not rule over you, neither shall my son rule over you *The Lord shall rule over you*" Words need not be more explicit, Gideon does not decline the honor, but denies their right to give it, neither does he compliment them

with invented declarations of his thanks, but in the positive style of a prophet charges them with disaffection to their proper sovereign, the King of Heaven

About one hundred and thirty years after this, they fell again into the same error The hankering which the Jews had for the idolatrous customs of the heathens is something exceedingly unaccountable, but so it was that, laying hold of the misconduct of Samuel's[4] two sons, who were entrusted with some secular concerns, they came in an abrupt and clamorous manner to Samuel, saying, "Behold thou art old, and thy sons walk not in thy ways, now make us a king to judge us like all the other nations And here we cannot but observe that their motives were bad viz that they might be like unto other nations, i e, the heathens whereas their true glory lay in being as much unlike them as possible "But the thing displeased Samuel when they said, Give us a king to judge us and Samuel prayed unto the Lord and the Lord said unto Samuel, Hearken unto the voice of the people in all that they say unto thee, for they have not rejected thee, but they have rejected me, *that I should not reign over them* According to all the works which they have done since the day that I brought them up out of Egypt even unto this day, wherewith they have forsaken me, and served other Gods so do they also unto thee Now therefore hearken unto their voice, howbeit, protest solemnly unto them and show them the manner of the king that shall reign over them ' i e, not of any particular king but the general manner of the kings of the earth whom Israel was so eagerly copying after And notwithstanding the great distance of time and difference of manners, the character is still in fashion And Samuel told all the words of the Lord unto the people, that asked of him a king And he said, This shall be the manner of the king that shall reign over you he will take your sons and appoint them for himself for his chariots and to be his horsemen and some shall run before his chariots (this description agrees with the present mode of impressing men), ' and he will appoint him captains over thousands and captains over fifties, and will set them to ear his ground and to reap his harvest, and to make his instruments of war and instruments of his chariots, and he will take your daughters

to be confectionaries, and to be cooks, and to be bakers" (this describes the expense and luxury as well as the oppression of kings), "and he will take your fields and your olive yards, even the best of them, and give them to his servants, and he will take the tenth of your seed and of your vineyards, and give them to his officers and to his servants" (by which we see that bribery, corruption, and favoritism are the standing vices of kings), "and he will take the tenth of your men servants, and your maid servants, and your goodliest young men, and your asses, and put them to his work, and he will take the tenth of your sheep, and ye shall be his servants, and ye shall cry out in that day because of your king which ye shall have chosen, *and the Lord will not hear you in that day*' This accounts for the continuation of monarchy, neither do the characters of the few good kings which have lived since either sanctify the title or blot out the sinfulness of the origin, the high encomium given of David takes no notice of him *officially as a king*, but only as a *man* after God's own heart "Nevertheless the people refused to obey the voice of Samuel and they said, Nay but we will have a king over us, that we may be like all the nations, and that our king may judge us, and go out before us and fight our battles" Samuel continued to reason with them, but to no purpose, he set before them their ingratitude but all would not avail, and seeing them fully bent on their folly, he cried out, 'I will call unto the Lord, and he shall send thunder and rain (which was then a punishment, being in the time of wheat harvest) "that ye may perceive and see that your wickedness is great which ye have done in the sight of the Lord *in asking you a king* So Samuel called unto the Lord, and the Lord sent thunder and rain that day, and all the people greatly feared the Lord and Samuel And all the people said unto Samuel Pray for thy servants unto the Lord thy God that we die not for *we have added unto our sins this evil, to ask a king*" These portions of scripture are direct and positive They admit of no equivocal construction That the Almighty has here entered his protest against monarchical government is true, or the scripture is false And a man has good reason to believe that there is as much of kingcraft as priestcraft in withholding the scripture

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with the free and unrestrained principles they professed to live by Wherefore hereditary succession in the early ages of monarchy could not take place as a matter of claim, but as something casual or complemental, but as few or no records were extant in those days, and traditionary history stuffed with fables, it was very easy, after the lapse of a few generations, to trump up some super stitious tale conveniently timed, Mahometlike, to cram hereditary right down the throats of the vulgar Perhaps the disorders which threatened, or seemed to threaten on the decease of a leader and the choice of a new one (for elections among ruffians could not be very orderly) induced many at first to favor hereditary preten sions by which means it happened, as it has happened since, that what at first was submitted to as a convenience was afterward claimed as a right

England since the conquest has known some few good monarchs, but groaned beneath a much larger number of bad ones, yet no man in his senses can say that their claim under William the Conqueror[4] is a very honorable one A French bastard landing with an armed banditti and establishing himself king of England against the consent of the natives is in plain terms a very paltry, rascally original It certainly has no divinity in it However, it is needless to spend much time in exposing the folly of hereditary right if there are any so weak as to believe it, let them promis cuously worship the ass and lion and welcome I shall neither copy their humility nor disturb their devotion

Yet I should be glad to ask how they *suppose* kings came at first? The question admits but of three answers, viz, either by lot by election or by usurpation If the first king was taken by lot it establishes a precedent for the next, which excludes heredi tary succession Saul was by lot yet the *succession* was not hereditary neither does it appear from that transaction that there was any intention it ever should If the first king of any country was by election that likewise establishes a precedent for the next for to say that the right of all future *generations* is taken away by the act of the first electors in their choice, not only of a king but of a family of kings forever has no parallel in or out of scripture but the doctrine of original sin which supposes the free

from the public in popish countries For monarchy in every instance is the popery of government

To the evil of monarchy we have added that of hereditary succession, and as the first is a degradation and lessening of ourselves so the second, claimed as a matter of right, is an insult and an imposition on posterity For all men being originally equals, no one by birth could have a right to set up his own family in perpetual preference to all others forever, and though himself might deserve some decent degree of honors of his co temporaries yet his descendants might be far too unworthy to inherit them One of the strongest natural proofs of the folly of hereditary right in kings is that nature disapproves it, otherwise she would not so frequently turn it into ridicule by giving mankind an *ass for a lion*

Secondly, as no man at first could possess any other public honors than were bestowed upon him, so the givers of those honors could have no power to give away the right of posterity, and though they might say "We choose you for our head," they could not without manifest injustice to their children say ' that your children and your children's children shall reign over ours forever " Because such an unwise, unjust, unnatural compact might (perhaps) in the next succession put them under the government of a rogue or a fool Most wise men in their private sentiments have ever treated hereditary right with contempt, yet it is one of those evils which when once established is not easily removed, many submit from fear, others from superstition, and the more powerful part shares with the king the plunder of the rest

This is supposing the present race of kings in the world to have had an honorable origin, whereas it is more than probable that, could we take off the dark covering of antiquity and trace them to their first rise, that we should find the first of them nothing better than the principal ruffian of some restless gang, whose savage manners or pre eminence in subtilty obtained him the title of chief among plunderers and who, by increasing in power and extending his depredations, overawed the quiet and defenseless to purchase their safety by frequent contributions Yet his electors could have no idea of giving hereditary right to his descendants, because such a perpetual exclusion of themselves was incompatible

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will of all men lost in Adam, and from such comparison, and it will admit of no other, hereditary succession can derive no glory For as in Adam all sinned and as in the first electors all men obeyed, as in the one all mankind were subjected to Satan and in the other to sovereignty, as our innocence was lost in the first and our authority in the last, and as both disable us from reassuming some former state and privilege, it unanswerably follows that original sin and hereditary succession are parallels Dishonorable rank! inglorious connection! yet the most subtle sophist cannot produce a juster simile

As to usurpation, no man will be so hardy as to defend it, and that William the Conqueror was a usurper is a fact not to be contradicted The plain truth is that the antiquity of English monarchy will not bear looking into

But it is not so much the absurdity as the evil of hereditary succession which concerns mankind Did it insure a race of good and wise men, it would have the seal of divine authority, but as it opens a door to the *foolish*, the *wicked*, and the *improper*, it has in it the nature of oppression Men who look upon themselves born to reign and others to obey soon grow insolent Selected from the rest of mankind, their minds are early poisoned by importance and the world they act in differs so materially from the world at large that they have but little opportunity of knowing its true interests and, when they succeed to the government, are frequently the most ignorant and unfit of any throughout the dominions

Another evil which attends hereditary succession is that the throne is subject to be possessed by a minor at any age, all which time the regency, acting under the cover of a king have every opportunity and inducement to betray their trust The same national misfortune happens when a king worn out with age and infirmity, enters the last stage of human weakness In both these cases the public becomes a prey to every miscreant who can tamper successfully with the follies either of age or infancy

The most plausible plea which has ever been offered in favor of hereditary succession is that it preserves a nation from civil wars, and were this true it would be weighty, whereas it is the most barefaced falsity ever imposed upon mankind The whole history

of England disowns the fact Thirty kings and two minors have reigned in that distracted kingdom since the conquest, in which time there have been (including the Revolution [b]) no less than eight civil wars and nineteen rebellions Wherefore, instead of making for peace, it makes against it and destroys the very foundation it seems to stand on

The contest for monarchy and succession between the houses of York and Lancaster [6] laid England in a scene of blood for many years Twelve pitched battles besides skirmishes and sieges were fought between Henry and Edward Twice was Henry prisoner to Edward, who in his turn was prisoner to Henry And so uncertain is the fate of war and the temper of a nation, when nothing but personal matters are the ground of a quarrel, that Henry was taken in triumph from a prison to a palace, and Edward obliged to fly from a palace to a foreign land yet, as sudden transitions of temper are seldom lasting, Henry in his turn was driven from the throne and Edward recalled to succeed him The Parliament always following the strongest side

This contest began in the reign of Henry the Sixth and was not entirely extinguished till Henry the Seventh,[7] in whom the families were united Including a period of sixty seven years, viz, from 1422 to 1489

In short monarchy and succession have laid (not this or that kingdom only) but the world in blood and ashes 'Tis a form of government which the word of God bears testimony against, and blood will attend it

If we inquire into the business of a king we shall find that in some countries they have none and after sauntering away their lives without pleasure to themselves or advantage to the nation withdraw from the scene and leave their successors to tread the same idle round In absolute monarchies the whole weight of business civil and *military* lies on the king, the children of Israel in their request for a king urged this plea, 'that he may judge us and go out before us and fight our battles" But in the countries where he is *neither a judge* nor a general, as in England a man would be puzzled to know what *is* his business

[b] [Reference here is to the Revolution of 1688]

The nearer any government approaches to a republic the less business there is for a king It is somewhat difficult to find a proper name for the government of England Sir William Meredith[8] calls it a republic but in its present state it is unworthy of the name because the corrupt influence of the crown by having all the places in its disposal has so effectually swallowed up the power and eaten out the virtue of the House of Commons (the republican part in the constitution) that the government of England is nearly as monarchical as that of France or Spain Men fall out with names without understanding them For it is the republican and not the monarchical part of the constitution of England which Englishmen glory in viz the liberty of choosing a House of Commons from out of their own body—and it is easy to see that when republican virtues fail slavery ensues Why is the constitution of England sickly but because monarchy has poisoned the republic the crown has engrossed the Commons

In England a king has little more to do than to make war and give away places which in plain terms is to impoverish the nation and set it together by the ears A pretty business indeed for a man to be allowed eight hundred thousand sterling a year for, and worshiped into the bargain! Of more worth is one honest man to society and in the sight of God than all the crowned ruffians that ever lived

Thoughts on the Present State of American Affairs

In the following pages I offer nothing more than simple facts plain arguments and common sense and have no other preliminaries to settle with the reader than that he will divest himself of prejudice and prepossession and suffer his reason and his feelings to determine for themselves that he will put on or rather that he will not put off the true character of a man and generously enlarge his views beyond the present day

Volumes have been written on the subject of the struggle between England and America Men of all ranks have embarked in the controversy from different motives and with various de

signs, but all have been ineffectual, and the period of debate is closed Arms as the last resource decide the contest, the appeal was the choice of the king, and the continent has accepted the challenge

It has been reported of the late Mr Pelham* (who, though an able minister, was not without his faults) that, on his being attacked in the House of Commons on the score that his measures were only of a temporary kind, replied, "they will last my time" Should a thought so fatal and unmanly possess the colonies in the present contest, the name of ancestors will be remembered by future generations with detestation

The sun never shined on a cause of greater worth 'Tis not the affair of a city a county a province, or a kingdom, but of a continent—of at least one-eighth part of the habitable globe 'Tis not the concern of a day, a year, or an age, posterity are virtually involved in the contest, and will be more or less affected even to the end of time by the proceedings now Now is the seed time of continental union faith, and honor The least fracture *now* will be like a name engraved with the point of a pin on the tender rind of a young oak, the wound would enlarge *with the* tree, and posterity read it in full grown characters

By referring the matter from [illegible]

politics is struck—

proposals etc pr [illegible]

mencement of hostilities are like the almanacs *of the last* year, which though proper then are superseded and useless now What ever was advanced by the advocates on either side of the question then terminated in one and the same point, viz, a union with Great Britain the only difference between the part [illegible]

[illegible]

As much has been said of the advantages of reconciliation which like an agreeable dream has passed away and left us as we were it is but right that we should examine the contrary side of the argument and inquire into some of the many material injuries which these colonies *sustain*, and always will sustain, by

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only true way of proving enemyship, if I may so call it France and Spain never were, nor perhaps ever will be, our enemies as *Americans*, but as our being the *subjects of Great Britain*

But Britain is the parent country, say some Then the more shame upon her conduct Even brutes do not devour their young nor savages make war upon their families, wherefore the assertion, if true, turns to her reproach, but it happens not to be true, or only partly so, and the phrase "parent" or "mother country" has been jesuitically adopted by the king and his parasites with a low papistical design of gaining an unfair bias on the credulous weakness of our minds Europe, and not England, is the parent country of America This New World has been the asylum for the persecuted lovers of civil and religious liberty from *every part* of Europe Hither have they fled, not from the tender embraces of the mother, but from the cruelty of the monster, and it is so far true of England that the same tyranny which drove the first emigrants from home pursues their descendants still

In this extensive quarter of the globe, we forget the narrow limits of three hundred and sixty miles (the extent of England) and carry our friendship on a larger scale, we claim brotherhood with every European Christian and triumph in the generosity of the sentiment

It is pleasant to observe by what regular gradations we [illegible] mount [illegible] with [illegible] parts [illegible] (bec[illegible] in many cases will be common) and distinguish him by the name of neighbor, if he meet him but a few miles from home he drops the narrow idea of a street and salutes him by the name of townsman', if he travel out of the county and meet him in any other he forgets the minor divisions of street and town and calls him "countryman" i e, "countyman but if in their foreign excursions they should associate in France or any other part of *Europe*, their local remembrance would be enlarged into that of 'Englishmen" And by a just parity of reasoning all Europeans meeting in America or any other quarter of the globe, are 'countrymen', for England, Holland,

being connected with and dependent on Great Britain To examine that connection and dependence on the principles of nature and common sense, to see what we have to trust to, if separated and what we are to expect, if dependent

I have heard it asserted by some that, as America has flourished under her former connection with Great Britain, the same connection is necessary toward her future happiness and will always have the same effect Nothing can be more fallacious than this kind of argument We may as well assert that because a child has thrived upon milk that it is never to have meat, or that the first twenty years of our lives is to become a precedent for the next twenty But even this is admitting more than is true, for I answer roundly that America would have flourished as much and probably much more, had no European power had anything to do with her The commerce by which she has enriched herself are the necessaries of life and will always have a market while *eating is the custom of Europe*

But she has protected us, say some That she has engrossed us is true, and defended the continent at our expense as well as her own is admitted, and she would have defended Turkey from the same motive, viz, for the sake of trade and dominion

Alas! we have been long led away by ancient prejudices and made large sacrifices to superstition We have boasted the protection of Great Britain without considering that her motive was *interest*, not *attachment*, and that she did not protect us from *our enemies* on *our account* but from *her enemies* on *her own account*, from those who had no quarrel with us on any *other account* and who will always be our enemies on the *same account* Let Britain waive her pretensions to the continent or the continent throw off the dependence and we should be at peace with France and Spain, were they at war with Britain The miseries of Hanover's last war [11] ought to warn us against connections

It has lately been asserted in *Parliament that the colonies have* no relation to each other but through the parent country, i e, that Pennsylvania and the Jerseys, and so on for the rest, are sister colonies by the way of England, this is certainly a very roundabout way of proving relationship, but it is the nearest and

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It is pleasant to observe by what regular gradations we surmount the force of local prejudices as we enlarge our acquaintance with the world A man born in any town in England divided into parishes will naturally associate most with his fellow parishioners (because their interests in many cases will be common) and distinguish him by the name of neighbor', if he meet him but a few miles from home he drops the narrow idea of a street and salutes him by the name of townsman if he travel out of the county and meet him in any other he *forgets the* minor divisions of street and town and calls him 'countryman" i e , "county man but if in their foreign excursions they should associate in France or any other part of *Europe*, their local remembrance would be enlarged into that of Englishmen" And by a just parity of reasoning all Europeans meeting in America, or any other quarter of the globe, are 'countrymen' , for England, Holland,

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I have heard it asserted by some that, as America has flourished under her former connection with Great Britain, the same connection is necessary toward her future happiness and will always have the same effect Nothing can be more fallacious than this kind of argument We may as well assert that because a child has thrived upon milk that it is never to have meat, or that *the first twenty years of our lives is to become a precedent for* the next twenty But even this is admitting more than is true for I answer roundly that America would have flourished as much and probably much more, had no European power had anything to do with her The commerce by which she has enriched herself are the necessaries of life and will always have a market while eating is the custom of Europe

But she has protected us, say some That she has engrossed us is true, and defended the continent at our expense as well as her own is admitted, and she would have defended Turkey from the same motive, viz, for the sake of trade and dominion

Alas! we have been long led away by ancient prejudices and made large sacrifices to superstition We have boasted the protection of Great Britain without considering that her motive was *interest*, not *attachment*, and that she did not protect us from *our enemies* on *our account* but from *her enemies* on *her own account*, from those who had no quarrel with us on any *other account* and who will always be our enemies on the *same account* Let Britain waive her pretensions to the continent or the continent throw off the dependence, and we should be at peace with France and Spain, were they at war with Britain The miseries of Hanover's last war [11] ought to warn us against connections

It has lately been asserted in Parliament that the colonies have no relation to each other but through the parent country, i e, that Pennsylvania and the Jerseys, and so on for the rest, are sister colonies by the way of England, this is certainly a very roundabout way of proving relationship, but it is the nearest and

directly to involve this continent in European wars and quarrels and sets us at variance with nations who would otherwise seek our friendship and against whom we have neither anger nor complaint As Europe is our market for trade, we ought to form no partial connection with any part of it It is the true interest of America to steer clear of European contentions, which she never can do while, by her dependence on Britain, she is made the makeweight in the scale of British politics

Europe is too thickly planted with kingdoms to be long at peace, and whenever a war breaks out between England and any foreign power, the trade of America goes to ruin *because of her connection with Britain* The next war may not turn out like the last, and should it not the advocates for reconciliation now will be wishing for separation then, because neutrality in that case would be a safer convoy than a man-of war Everything that is right or natural pleads for separation The blood of the slain, the weeping voice of nature cries "'Tis *time to part*" Even the distance at which the Almighty has placed England and America is a strong and natural proof that the authority of the one over the other was never the design of heaven The time likewise at which the continent was discovered adds weight to the argument, and the manner in which it was peopled increases the force of it The Reformation was preceded by the discovery of America—as if the Almighty graciously meant to open a sanctuary to the persecuted in future years when home should afford neither friendship nor safety

The authority of Great Britain over this continent is a form of government which sooner or later must have *an end* And a serious mind can draw no true pleasure by looking forward, under the painful and positive conviction that what he calls 'the present constitution is merely temporary As parents we can have no joy, knowing that this government is *not sufficiently* lasting to insure anything which we may bequeath to posterity And by a plain method of argument as we are *running* the next generation into debt we ought to do the work of it, otherwise we use them meanly and pitifully In order to discover the line of our duty rightly we should take our children in our hand and fix our sta

Germany, or Sweden, when compared with the whole, stand in the same places on the larger scale which the divisions of street town, and county do on the smaller ones—distinctions too limited for continental minds Not one third of the inhabitants, even of this province,[c] are of English descent Wherefore I reprobate the phrase of parent or mother country applied to England only as being false, selfish, narrow, and ungenerous

But, admitting that we were all of English descent, what does it amount to? Nothing Britain, being now an open enemy, extinguishes every other name and title, and to say that reconciliation is our duty is truly farcical The first king of England of the present line (William the Conqueror) was a Frenchman and half the peers of England are descendants from the same country, wherefore, by the same method of reasoning, England ought to be governed by France

Much has been said of the united strength of Britain and the colonies, that in conjunction they might bid defiance to the world But this is mere presumption, the fate of war is uncertain, neither do the expressions mean anything, for this continent would never suffer itself to be drained of inhabitants to support the British arms in either Asia, Africa, or Europe

Besides, what have we to do with setting the world at defiance? Our plan is commerce, and that, well attended to, will secure us the peace and friendship of all Europe, because it is the interest of all Europe to have America a free port Her trade will always be a protection, and her barrenness of gold and silver secure her from invaders

I challenge the warmest advocate for reconciliation to show a single advantage that this continent can reap by being connected with Great Britain I repeat the challenge not a single advantage is derived Our corn will fetch its price in any market in Europe, and our imported goods must be paid for, buy them where we will

But the injuries and disadvantages we sustain by that connection are without number, and our duty to mankind at large, as well as to ourselves, instruct us to renounce the alliance, because any submission to or dependence on Great Britain tends

[c] [Pennsylvania.]

directly to involve this continent in European wars and quarrels and sets us at variance with nations who would otherwise seek our friendship and against whom we have neither anger nor complaint As Europe is our market for trade, we ought to form no partial connection with any part of it It is the true interest of America to steer clear of European contentions, which she never can do while, by her dependence on Britain, she is made the makeweight in the scale of British politics

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tion a few years farther into life, that eminence will present a prospect which a few present fears and prejudices conceal from our sight

Though I would carefully avoid giving unnecessary offense, yet I am inclined to believe that all those who espouse the doctrine of reconciliation may be included within the following descriptions Interested men, who are not to be trusted, weak men who *can not* see, prejudiced men who *will not* see, and a certain set of moderate men who think better of the European world than it deserves, and this last class, by an ill judged deliberation will be the cause of more calamities to this continent than all the other three

It is the good fortune of many to live distant from the scene of sorrow, the evil is not sufficiently brought to *their* doors to make *them* feel the precariousness with which all American property is possessed But let our imaginations transport us a few moments to Boston, that seat of wretchedness will teach us wisdom and instruct us forever to renounce a power in whom we can have no trust The inhabitants of that unfortunate city who, but a few months ago, were in ease and affluence have now no other alternative than to stay and starve or turn out to beg [13] Endangered by the fire of their friends if they continue within the city, and plundered by the soldiery if they leave it In their present condition they are prisoners without the hope of redemp tion, and in a general attack for their relief they would be ex posed to the fury of both armies

Men of passive tempers look somewhat lightly over the offenses of Great Britain and still hoping for the best, are apt to call out, "Come, come, we shall be friends again for all this" But examine the passions and feelings of mankind, bring the doctrine of recon ciliation to the touchstone of nature, and then tell me whether you can hereafter love, honor, and faithfully serve the power that has carried fire and sword into your land? If you cannot do all these, then are you only deceiving yourselves, and by your delay bringing ruin upon posterity Your future connection with Britain, whom you can neither love nor honor, will be forced and un natural, and being formed only on the plan of present convenience

will, in a little time, fall into a relapse more wretched than the first But if you say you still can pass the violations over, then I ask, has your house been burned? Has your property been destroyed before your face? Are your wife and children destitute of a bed to lie on or bread to live on? Have you lost a parent or a child by their hands, and yourself the ruined and wretched survivor? If you have not, then are you not a judge of those who have But if you have and can still shake hands with the murderers, then are you unworthy the name of husband, father, friend, or lover, and whatever may be your rank or title in life, you have the heart of a coward and the spirit of a sycophant

This is not inflaming or exaggerating matters, but trying them by those feelings and affections which nature justifies and without which we should be incapable of discharging the social duties of life or enjoying the felicities of it I mean not to exhibit horror for the purpose of provoking revenge, but to awaken us from fatal and unmanly slumbers, that we may pursue determinately some fixed object It is not in the power of Britain or Europe to conquer America, if she do not conquer herself by delay and timidity The present winter is worth an age if rightly employed, but if lost or neglected the whole continent will partake of the misfortune and there is no punishment which that man will not deserve, be he who or what or where he will, that may be the means of sacrificing a season so precious and useful

It is repugnant to reason to the universal order of things, to all examples from former ages, to suppose that this continent can longer remain subject to any external power The most sanguine in Britain does not think so The utmost stretch of human wisdom cannot, at this [illegible]
can promise the [illegible]
now a fallacious [illegible]
art cannot sup[illegible] [illegible], as Milton wisely expresses, "never can true reconcilement grow where wounds of deadly hate have pierced so deep "[13]

Every quiet method for peace has been ineffectual Our prayers have been rejected with disdain, and only tended to convince us that nothing flatters vanity or confirms obstinacy in kings more

than repeated petitioning—and nothing has contributed more than that very measure to make the kings of Europe absolute Witness Denmark and Sweden Wherefore, since nothing but blows will do, for God s sake let us come to a final separation and not leave the next generation to be cutting throats under the violated unmeaning names of parent and child

To say they will never attempt it again is idle and visionary we thought so at the repeal of the Stamp Act,[14] yet a year or two undeceived us as well may we suppose that nations which have been once defeated will never renew the quarrel

As to government matters, it is not in the power of Britain to do this continent justice The business of it will soon be too weighty and intricate to be managed with any tolerable degree of convenience by a power so distant from us and so very ignorant of us, for if they cannot conquer us they cannot govern us To be always running three or four thousand miles with a tale or a petition waiting four or five months for an answer, which, when obtained requires five or six more to explain it in will in a few years be looked upon as folly and childishness There was a time when it was proper, and there is a proper time for it to cease

Small islands not capable of protecting themselves are the proper objects for kingdoms to take under their care but there is something very absurd in supposing a continent to be perpetually governed by an island In no instance has nature made the satellite larger than its primary planet and as England and America, with respect to each other reverse the common order of nature, it is evident they belong to different systems—England to Europe America to itself

I am not induced by motives of pride party or resentment to espouse the doctrine of separation and independence I am clearly, positively, and conscientiously persuaded that it is the true interest of this continent to be so that everything short of *that* is mere patchwork, that it can afford no lasting felicity—that it is leaving the sword to our children and shrinking back at a time when a little more, a little further would have rendered this continent the glory of the earth

As Britain has not manifested the least inclination toward a

compromise, we may be assured that no terms can be obtained worthy the acceptance of the continent, or any ways equal to the expense of blood and treasure we have been already put to

The object contended for ought always to bear some just proportion to the expense The removal of North,[15] or the whole detestable junto, is a matter unworthy the millions we have expended A temporary stoppage of trade was an inconvenience which would have sufficiently balanced the repeal of all the acts complained of, had such repeals been obtained, but if the whole continent must take up arms if every man must be a soldier, it is scarcely worth our while to fight against a contemptible ministry only Dearly, dearly do we pay for the repeal of the acts, if that is all we fight for for in a just estimation it is as great a folly to pay a Bunker Hill price for law as for land[16] As I have always considered the independence of this continent as an event which sooner or later must arrive so from the late rapid progress of the continent to maturity, the event cannot be far off Wherefore, on the breaking out of hostilities it was not worth the while to have disputed a matter which time would have finally redressed, unless we meant to be in earnest otherwise it is like wasting an estate on a suit at law to regulate the trespasses of a tenant whose lease is just expiring No man was a warmer wisher for a reconciliation than myself before the fatal nineteenth of April, 1775,[a] but the moment the event of that day was made known I rejected the hardened, sullen tempered Pharaoh of England[17] forever and disdain the wretch that with the pretended title of *father of his people*, can unfeelingly hear of their slaughter and composedly sleep with their blood upon his soul

But admitting that matters were now made up, what would be the event? I answer, the ruin of the continent And that for several reasons

First The powers of governing still remaining in the hands of the king he will have a *negative* over the whole legislation of this continent And as he has shown himself such an inveterate enemy to liberty and discovered such a thirst for arbitrary power, is he or is he not a proper man to say to these colonies, "You shall

[a] Massacre at Lexington.

make no laws but what I please!"? And is there any inhabitant of America so ignorant as not to know that, according to what is called the "present Constitution," that this continent can make no laws but what the king gives leave to, and is there any man so unwise as not to see that (considering what has happened) he will suffer no law to be made here but such as suits *his* purpose? We may be as effectually enslaved by the want of laws in America as by submitting to laws made for us in England After matters are made up (as it is called), can there be any doubt but the whole power of the crown will be exerted to keep this continent as low and humble as possible? Instead of going forward we shall go backward, or be perpetually quarrelling, or ridiculously petitioning We are already greater than the king wishes us to be, and will he not hereafter endeavor to make us less? To bring the matter to one point, is the power who is jealous of our prosperity a proper power to govern us? Whoever says "No" to this question is an independent, for independence means no more than whether we shall make our own laws or whether the king, the greatest enemy this continent has or can have, shall tell us "there shall be no laws but such as I like"

But the king, you will say, has a negative in England, the people there can make no laws without his consent In point of right and good order, there is something very ridiculous that a youth of twenty one (which has often happened) shall say to several millions of people older and wiser than himself, I forbid this or that act of yours to be law" But in this place I decline this sort of reply, though I will never cease to expose the absurdity of it, and only answer that England being the king s residence and America not so, makes quite another case The king s negative *here* is ten times more dangerous and fatal than it can be in England for *there* he will scarcely refuse his consent to a bill for putting England into as strong a state of defense as possible, and in America he would never suffer such a bill to be passed

America is only a secondary object in the system of British politics England consults the good of *this* country no farther than it answers her *own* purpose Wherefore her own interest leads her to suppress the growth of *ours* in every case which does not pro

mote her advantage or in the least interferes with it A pretty state we should soon be in under such a secondhand government, considering what has happened! Men do not change from enemies to friends by the alteration of a name And in order to show that reconciliation now is a dangerous doctrine, I affirm *that it would be policy in the king at this time to repeal the acts, for the sake of reinstating himself in the government of the provinces*, in order that *he may accomplish by craft and subtlety in the long run what he cannot do by force and violence in the short one* Reconciliation and ruin are nearly related

Secondly That as even the best terms which we can expect to obtain can amount to no more than a temporary expedient, or a kind of government by guardianship, which can last no longer than till the colonies come of age, so the general face and state of things in the interim will be unsettled and unpromising Emigrants of property will not choose to come to a country whose form of government hangs but by a thread, and who is every day tottering on the brink of commotion and disturbance, and numbers of the present inhabitants would lay hold of the interval to dispose of their effects and quit the continent

But the most powerful of all arguments is that nothing but independence, i e a continental form of government, can keep the peace of the continent and preserve it inviolate from civil wars I dread the event of a reconciliation with Britain now, as it is more than probable that it will be followed by a revolt somewhere or other the consequences of which may be far more fatal than all the malice of Britain

Thousands are already ruined by British barbarity (thousands more will probably suffer the same fate) Those men have other feelings than us who have nothing suffered All they now possess is liberty what they before enjoyed is sacrificed to its service, and having nothing more to lose they disdain submission Besides, the general temper of the colonies toward a British government will be like that of a youth who is nearly *out of* his time, they will care very little about her And a government which cannot preserve the peace is no government at all and in that case we pay our money

for nothing, and pray what is it that Britain can do, whose power will be wholly on paper, should a civil tumult break out the very day after reconciliation? I have heard some men say, many of whom I believe spoke without thinking, that they dreaded an independence, fearing that it would produce civil wars It is but seldom that our first thoughts are truly correct, and that is the case here, for there are ten times more to dread from a patched up connection than from independence I make the sufferer's case my own, and I protest that, were I driven from house and home, my property destroyed, and my circumstances ruined, that as a man, sensible of injuries, I could never relish the doctrine of reconciliation or consider myself bound thereby

The colonies have manifested such a spirit of good order and obedience to continental government as is sufficient to make every reasonable person easy and happy on that head No man can assign the least pretense for his fears on any other grounds than such as are truly childish and ridiculous, viz, that one colony will be striving for superiority over another

Where there are no distinctions, there can be no superiority, perfect equality affords no temptation The republics of Europe are all (and we may say always) in peace Holland and Switzerland are without wars, foreign or domestic Monarchical governments it is true, are never long at rest, the crown itself is a temptation to enterprising ruffians at home, and that degree of pride and insolence ever attendant on regal authority swells into a rupture with foreign powers in instances where a republican government, by being formed on more natural principles, would negotiate the mistake

If there is any true cause of fear respecting independence, it is because no plan is yet laid down Men do not see their way out Wherefore, as an opening into that business I offer the following hints, at the same time modestly affirming that I have no other opinion of them myself than that they may be the means of giving rise to something better Could the straggling thoughts of individuals be collected, they would frequently form materials for wise and able men to improve into useful matter

Let the assemblies be annual, with a president only The representation more equal, their business wholly domestic, and subject to the authority of a Continental Congress

Let each colony be divided into six, eight, or ten convenient districts, each district to send a proper number of delegates to Congress, so that each colony send at least thirty The whole number in Congress will be at least 390 Each Congress to sit and to choose a president by the following method When the delegates are met, let a colony be taken from the whole thirteen colonies by lot after which let the whole Congress choose (by ballot) a president from out of the delegates of *that* province In the next Congress, let a colony be taken by lot from twelve only, omitting that colony from which the president was taken in the former Congress, and so proceeding on till the whole thirteen shall have had their proper rotation And in order that nothing may pass into a law but what is satisfactorily just not less than three fifths of the Congress to be called a majority He that will promote discord under a government so equally formed as this would have joined Lucifer in his revolt

But as there is a peculiar delicacy from whom or in what manner this business must first arise and as it seems most agreeable and consistent that it should come from some intermediate body between the governed and the governors that is, between the Congress and the people let a continental conference be held in the following manner and for the following purpose

A committee of twenty six members of Congress, viz, two for each colony Two members from each House of Assembly or Provincial Convention and five representatives of the *people at large*, to be chosen in the capital city or town of each province for and in behalf of the whole province by as many qualified voters as shall think proper to attend from all parts of the province for that purpose or if more convenient the representatives may be chosen in two or three of the most populous parts thereof In this conference

be able and useful counselors, and the whole, being empowered by the people, will have a truly legal authority

The conferring members being met, let their business be to frame a Continental Charter or Charter of the United Colonies (answering to what is called the Magna Charta[18] of England), fixing the number and manner of choosing members of Congress, members of Assembly, with their date of sitting, and drawing the line of business and jurisdiction between them (Always remembering that our strength is continental, not provincial) Securing freedom and property to all men, and above all things the free exercise of religion, according to the dictates of conscience, with such other matter as it is necessary for a charter to contain Immediately after which, the said conference to dissolve, and the bodies which shall be chosen conformable to the said charter to be the legislators and governors of this continent for the time being Whose peace and happiness may God preserve *Amen*

Should any body of men be hereafter delegated for this or some similar purpose, I offer them the following extracts from that wise observer on governments, Dragonetti[19] "The science," says he, "of the politician consists in fixing the true point of happiness and freedom Those men would deserve the gratitude of ages, who should discover a mode of government that contained the greatest sum of individual happiness, with the least national expense" Dragonetti on *Virtues and Reward*

But where, says some, is the king of America? I ll tell you friend he reigns above and does not make havoc of mankind like the royal brute of Britain Yet that we may not appear to be defective even in earthly honors, let a day be solemnly set apart for proclaiming the charter let it be brought forth placed on the divine law, the word of God, let a crown be placed thereon, by which the world may know that, so far as we approve of monarchy, that in America *the law is king* For as in absolute governments the king is law, so in free countries the law *ought* to be king, and *there ought to be no other* But lest any ill use should afterward arise, let the crown at the conclusion of the ceremony be demolished and scattered among the people, whose right it is

A government of our own is our natural right and when a man

seriously reflects on the precariousness of human affairs, he will become convinced that it is infinitely wiser and safer to form a Constitution of our own in a cool, deliberate manner while we have it in our power than to trust such an interesting event to time and chance If we omit it now, some Massanello* may hereafter arise, who, laying hold of popular disquietudes, may collect together the desperate and the discontented, and by assuming to themselves the powers of government may sweep away the liberties of the continent like a deluge Should the government of America return again into the hands of Britain, the tottering situation of things will be a temptation for some desperate adventurer to try his fortune and in such a case what relief can Britain give? Ere she could hear the news, the fatal business might be done and ourselves suffering like the wretched Britons under the oppression of the conqueror Ye that oppose independence now, ye know not what ye do ye are opening a door to eternal tyranny by keeping vacant the seat of government There are thousands and tens of thousands who would think it glorious to expel from the continent that barbarous and hellish power which has stirred up the Indians and the Negroes to destroy us the cruelty has a double guilt it is dealing brutally by us and treacherously by them

To talk of friendship with those in whom our reason forbids us to have faith and our affections wounded through a thousand pores instruct us to detest is madness and folly Every day wears out the little remains of kindred between us and them and can there be any reason to hope that as the relationship expires the affection will increase or that we shall agree better when we have ten times more and greater concerns to quarrel over than ever?

Ye that tell us of harmony and reconciliation can ye restore to us the time that is past? Can ye give to prostitution its former innocence? Neither can ye reconcile Britain and America The last cord now is broken the people of England are presenting addresses against us There are injuries which nature cannot forgive, she

*Thomas Anello otherwise Massanello, a fisherman of Naples who after spiriting up his countrymen in the public market place against the oppression of the Spaniards, to whom the place was then subject, prompted them to revolt and in the space of a day became king

would cease to be nature if she did As well can the lover forgive the ravisher of his mistress as the continent forgive the murders of Britain The Almighty has implanted in us these unextinguishable feelings for good and wise purposes They are the guardians of his image in our hearts They distinguish us from the herd of common animals The *social compact would dissolve and justice be* extirpated [from] the earth, or have only a casual existence, were we callous to the touches of affection The robber and the murderer would often escape unpunished did not the injuries which our tempers sustain provoke us into justice

O ye that love mankind! Ye that dare oppose not only the tyranny but the tyrant, stand forth! Every spot of the *Old World* is overrun with oppression Freedom has been hunted round the globe Asia and Africa have long expelled her Europe regards her like a stranger, and England has given her warning to depart O! receive the fugitive and prepare in time an asylum for mankind

Of the Present Ability of America, With Some Miscellaneous Reflections

I have never met with a man either in England or America who has not confessed his opinion that a separation between the countries would take place one time or other And there is no instance in which we have shown less judgment than in endeavoring to describe what we call the ripeness or fitness of the continent for independence

As all men allow the measure and vary only in their opinion of the time, let us, in order to remove mistakes take a general survey of things and endeavor if possible, to find out the *very* time But we need not go far, the inquiry ceases at once for the *time has found us* The general concurrence the glorious union of all things prove the fact

It is not in numbers but in unity that our great strength lies, yet our present numbers are sufficient to repel the force of all the world *The continent* has at this time the largest body of armed and disciplined men of any power under heaven and is just arrived at that pitch of strength in which no single colony is able to sup

ort itself, and the whole, when united, can accomplish the mat r, and either more or less than this might be fatal in its effects our land force is already sufficient, and as to naval affairs, we can ot be insensible that Britain would never suffer an American man f war to be built while the continent remained in her hands Therefore we should be no forwarder a hundred years hence in hat branch than we are now, but the truth is we should be less so because the timber of the country is every day diminishing, and that which will remain at last will be far off and difficult to procure

Were the continent crowded with inhabitants, her sufferings under the present circumstances would be intolerable The more seaport towns we had the more should we have both to defend and to lose Our present numbers are so happily proportioned to our wants that no man need be idle The diminution of trade affords an army and the necessities of an army create a new trade

Debts we have none, and whatever we may contract on this account will serve as a glorious memento of our virtue Can we but leave posterity with a settled form of government, an independent constitution of its own the purchase at any price will be cheap But to expend millions for the sake of getting a few vile acts repealed and routing the present ministry only is unworthy the charge and is using posterity with the utmost cruelty, because it is leaving them the great work to do and a debt upon their backs from which they derive no advantage Such a thought is unworthy a man of honor and is the true characteristic of a narrow heart and a peddling politician

The debt we may contract does not deserve our regard if the work be but accomplished No nation ought to be without a debt A national debt is a national bond and when it bears no interest is in no case a grievance Britain is oppressed with a debt of upward of one hundred and forty millions sterling for which she pays upward of four millions interest And as a compensation for her debt she has a large navy America is without a debt and with out a navy yet for the twentieth part of the English national debt could have a navy as large again The navy of England is not worth at this time more than three millions and a half sterling

The first and second editions of this pamphlet were published without the following calculations, which are now given as a proof that the above estimation of the navy is a just one See Entic's *Naval History*,[20] Intro, p 56

The charge of building a ship of each rate and furnishing her with masts, yards, sails, and rigging, together with a proportion of eight months boatswain's and carpenter's sea stores, as calculated by Mr Burchett,[21] Secretary to the navy

For a ship of 100 guns	35,553 *l*
90	29,886
80	23,638
70	17,785
60	14,197
50	10,606
40	7,558
30	5,846
20	3,710

And from hence it is easy to sum up the value or cost rather, of the whole British navy which in the year 1757, when it was at its greatest glory, consisted of the following ships and guns

Ships	*Guns*	*Cost of One*	*Cost of All*
6	100	35 553 *l*	213 318 *l*
12	90	29,886	358,632
12	80	23,638	283,656
43	70	17,785	764 755
35	60	14,197	496,895
40	50	10 606	424,240
45	40	7,558	340,110
58	20	3 710	215,180
85	Sloops, bombs and fireships, one with another, at	2 000	170,000
		Cost	3 266,786 *l*
		Remains for guns	233 214
		Total	3 500 000 *l*

No country on the globe is so happily situated or so internally capable of raising a fleet as America Tar, timber, iron, and cordage are her natural produce We need go abroad for nothing Whereas the Dutch, who make large profits by hiring out their ships of war to the Spaniards and Portuguese, are obliged to import most of the materials they use We ought to view the building a fleet as an article of commerce, it being the natural manufactory of this country It is the best money we can lay out A navy when finished is worth more than it cost And is that nice point in national policy in which commerce and protection are united Let us build, if we want them not, we can sell and by that means replace our paper currency with ready gold and silver

In point of manning a fleet, people in general run into great errors, it is not necessary that one fourth part should be sailors The terrible privateer, Captain Death, stood the hottest engagement of any ship last war,[22] yet had not twenty sailors on board, though her complement of men was upward of two hundred A few able and social sailors will soon instruct a sufficient number of active landmen in the common work of a ship Wherefore we never can be more capable to begin on maritime matters than now while our timber is standing, our fisheries blocked up, and our sailors and shipwrights out of employ Men-of-war, of seventy and eighty guns were built forty years ago in New England, and why not the same now? Shipbuilding is America's greatest pride and in which she will in time excel the whole world The great empires of the east are mostly inland and consequently excluded from the possibility of rivaling her Africa is in a state of barbarism, and no power in Europe has either such an extent of coast or such an internal supply of materials Where nature has given the one, she has withheld the other to America only has she been liberal of both The vast empire of Russia is almost shut out from the sea, wherefore her boundless forests, her tar, iron, and cordage are only articles of commerce

In point of safety, ought we to be without a fleet? We are not the little people now which we were sixty years ago, at that time we might have trusted our property in the streets, or fields rather, and slept securely without locks or bolts to our doors or windows

The first and second editions of this pamphlet were published without the following calculations, which are now given as a proof that the above estimation of the navy is a just one See Entics *Naval History*,[20] Intro , p 56

The charge of building a ship of each rate and furnishing her with masts, yards, sails, and rigging, together with a proportion of eight months boatswain's and carpenter's sea stores, as calculated by Mr Burchett,[21] Secretary to the navy

For a ship of 100 guns	35,553 *l*
90	29,886
80	23,638
70	17,785
60	14,197
50	10,606
40	7,558
30	5 846
20	3,710

And from hence it is easy to sum up the value or cost rather, of the whole British navy which in the year 1757 when it was at its greatest glory, consisted of the following ships and guns

Ships	*Guns*	*Cost of One*	*Cost of All*
6	100	35,553 *l*	213 318 *l*
12	90	29,886	358,632
12	80	23,638	283,656
43	70	17,785	764 755
35	60	14,197	496,895
40	50	10 606	424,240
45	40	7,558	340,110
58	20	3,710	215,180
85	Sloops, bombs and fireships, one with another, at	2,000	170,000
		Cost	3 266,786 *l*
		Remains for guns	233 214
		Total	3,500 000 *l*

have nor claim any foreign dominion, our whole force would be employed on our own coast, where we should, in the long run, have two to one the advantage of those who had three or four thousand miles to sail over before they could attack us and the same distance to return in order to refit and recruit And although Britain by her fleet, has a check over *our trade to Europe*, we have as large a one over her trade to the West Indies, which, by laying in the neighborhood of the continent, lies entirely at its mercy

Some method might be fallen on to keep up a naval force in time of peace, if we should not judge it necessary to support a constant navy If premiums were to be given to merchants to build and employ in their service ships mounted with twenty, thirty, forty, or fifty guns (the premiums to be in proportion to the loss of bulk to the merchants), fifty or sixty of those ships, with a few guardships on constant duty, would keep up a sufficient navy, and that without burdening ourselves with the evil so loudly complained of in England of suffering their fleet in time of peace to lie rotting in the docks To unite the sinews of commerce and defense is sound policy, for when our strength and our riches play into each other's hand, we need fear no external enemy

In almost every article of defense we abound Hemp flourishes even to rankness so that we need not want cordage Our iron is superior to that of other countries Our small arms equal to any in the world Cannon we can cast at pleasure Saltpeter and gunpowder we are every day producing Our knowledge is hourly improving Resolution is our inherent character, and courage has never yet forsaken us Wherefore what is it that we want? Why is it that we hesitate? From Britain we can expect nothing but ruin If she is once admitted to the government of America again, this continent will not be worth living in Jealousies will be always arising insurrections will be *constantly* happening, and who will go forth to quell them? Who will venture his life to reduce his own countrymen *to a foreign* obedience? The difference between Pennsylvania and Connecticut respecting some unlocated lands, shows the insignificance of a British government and fully proves that nothing but continental authority can regulate continental matters

Another reason why the present time is preferable to all others

The case is now altered, and our methods of defense ought to improve with our increase of property A common pirate, twelve months ago, might have come up the Delaware [23] and laid the city of Philadelphia under instant contribution for what sum he pleased and the same might have happened to other places Nay, any daring fellow, in a brig of fourteen or sixteen guns, might have robbed the whole continent and carried off half a million of money These are circumstances which demand our attention and point out the necessity of naval protection

Some perhaps will say that, after we have made it up with Britain, she will protect us Can they be so unwise as to mean that she shall keep a navy in our harbors for that purpose? Common sense will tell us that the power which has endeavored to subdue us is, of all others, the most improper to defend us Conquest may be effected under the pretense of friendship, and ourselves, *after a* long and brave resistance, be at last cheated into slavery And if her ships are not to be admitted into our harbors, I would ask, how is she to protect us? A navy three or four thousand miles off can be of little use, and on sudden emergencies none at all Wherefore, if we must hereafter protect ourselves, why not do it for ourselves? Why do it for another?

The English list of ships of war is long and formidable, but not a tenth part of them are at any one time fit for service numbers of them not in being, yet their names are pompously continued in the list if only a plank be left of the ship and not a fifth part of such as are fit for service can be spared on any one station at one time The East and West Indies Mediterranean, Africa and other parts over which Britain extends her claim make large demands upon her navy From a mixture of prejudice and inattention, we have contracted a false notion respecting the navy of England and have talked as if we should have the whole of it to encounter at once, and for that reason supposed that we must have one as large, which not being instantly practicable has been made use of by a set of disguised Tories to discourage our beginning thereon Nothing can be farther from truth than this, for if America had only a twentieth part of the naval force of Britain she would be by far an overmatch for her, because, as we neither

have nor claim any foreign dominion our whole force would be employed on our own coast where we should in the long run have two to one the advantage of those who had three or four thousand miles to sail over before they could attack us and the same distance to return in order to refit and recruit And although Britain by her fleet has a check over our trade to Europe we have as large a one over her trade to the West Indies which by laying in the neighborhood of the continent lies entirely at its mercy

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happens to a nation but once, viz, the time of forming itself into a government. Most nations have let slip the opportunity, and by that means have been compelled to receive laws from their conquerors instead of making laws for themselves First they had a king and then a form of government, whereas the articles or charter of government should be formed first and men delegated to execute them afterward, but from the errors of other nations let us learn wisdom and lay hold of the present opportunity *to begin government at the right end*

When William the Conqueror subdued England, he gave them law at the point of the sword, and until we consent that the seat of government in America be legally and authoritatively occupied, we shall be in danger of having it filled by some fortunate ruffian who may treat us in the same manner, and then where will be our freedom? where our property?

As to religion, I hold it to be the indispensable duty of all government to protect all conscientious professors thereof, and I know of no other business which government has to do therewith Let a man throw aside that narrowness of soul, that selfishness of principle, which the niggards of all professions are so unwilling to part with, and he will be at once delivered of his fears on that head [illegible]

[illegible] Almighty that there should be diversity of religious opinions among us It affords a larger field for our Christian kindness Were we all of one way of thinking, our religious dispositions would want matter for probation, and on this liberal principle I look on the various denominations among us to be like children of the same family, differing only in what is called their Christian names

In pages [30-31] I threw out a few thoughts on the propriety of a Continental Charter (for I only presume to offer hints, not plans), and in this place I take *the liberty of* [illegible]

is that the fewer our numbers are, the more land there is yet un occupied, which, instead of being lavished by the king on his worthless dependents, may be hereafter applied, not only to the discharge of the present debt, but to the constant support of gov ernment No nation under heaven has such an advantage as this

The infant state of the Colonies, as it is called, so far from being against, is an argument in favor of independence We are suffi ciently numerous, and were we more so we might be less united It is a matter worthy of observation that the more a country is peopled, the smaller their armies are In military numbers the ancients far exceeded the moderns, and the reason is evident, for trade being the consequence of population men become too much absorbed thereby to attend to anything else Commerce diminishes the spirit both of patriotism and military defense And history sufficiently informs us that the bravest achievements were always accomplished in the nonage of a nation With the increase of com merce England has lost its spirit The city of London notwith standing its numbers, submits to continued insults with the pa tience of a coward The more men have to lose, the less willing are they to venture The rich are, in general, slaves to fear and submit to courtly power with the trembling duplicity of a spaniel

Youth is the seedtime of good habits, as well in nations as in individuals It might be difficult, if not impossible to form the continent into one government half a century hence The vast variety of interests, occasioned by an increase of trade and popu lation, would create confusion Colony would be against colony Each being able might scorn each other s assistance and while the proud and foolish gloried in their little distinctions the wise would lament that the union had not been formed before Where fore the present time is the true time for establishing it The inti macy which is contracted in infancy and the friendship which is formed in misfortune are of all others the most lasting and un alterable Our present union is marked with both these characters, we are young and we have been distressed but our concord has withstood our troubles and fixes a memorable era for posterity to glory in

The present time likewise, is that peculiar time which never

and are frequently surprised into reason by their mistakes Mr Cornwall[24] (one of the Lords of the Treasury) treated the petition of the New York Assembly with contempt because *that* house, he said, consisted but of twenty six members which trifling number, he argued, could not with decency be put for the whole We thank him for his involuntary honesty[f]

To conclude however strange it may appear to some or however unwilling they may be to think so matters not but many strong and striking reasons may be given to show that nothing can settle our affairs so expeditiously as an open and determined declaration for independence Some of which are

Firstly It is the custom of nations when any two are at war, for some other powers not engaged in the quarrel to step in as mediators and bring about the preliminaries of a peace But while America calls herself the subject of Great Britain no power how ever well disposed she may be can offer her mediation Wherefore, in our present state we may quarrel on forever

Secondly It is unreasonable to suppose that France or Spain will give us any kind of assistance if we mean only to make use of that assistance for the purpose of repairing the breach and strengthening the connection between Britain and America, be cause those powers would be sufferers by the consequences

Thirdly While we profess ourselves the subjects of Britain we must in the eye of foreign nations be considered as *rebels* The precedent is somewhat dangerous to their peace for men to be in arms under the name of subjects we on the spot *can solve* the paradox but to unite resistance and subjection requires an idea much too refined for common understanding

Fourthly Were a manifesto to be published and dispatched to foreign courts setting forth the miseries we have endured and the peaceable methods which we have ineffectually used for redress declaring at the same time that not being able any longer to live happily or safely under the cruel disposition of the British court,

[f] Those who would fully understand of what great consequence a large and equal representation is to a state should read Burgh s *Political Disquisitions* [James Burgh *Political Disquisitions or an Enquiry into Public Errors Defects and Abuses* 3 vols London 1774 5]

I have heretofore likewise mentioned the necessity of a large and equal representation and there is no political matter which more deserves our attention A small number of electors or a small number of representatives are equally dangerous But if the number of the representatives be not only small but unequal the danger is increased As an instance of this I mention the following when the associators petition was before the House of Assembly of Pennsylvania twenty eight members only were present all the Bucks County members being eight voted against it and had seven of the Chester members done the same this whole province had been governed by two counties only, and this danger it is always exposed to The unwarrantable stretch likewise which that house made in their last sitting to gain an undue authority over the delegates of that province ought to warn the people at large how they trust power out of their own hands A set of instructions for the delegates were put together which in point of sense and business would have dishonored a schoolboy and after being approved by a few—a very few—withoutdoors were carried into the house and there passed *in behalf of the whole colony*, whereas did the whole colony know with what ill will that house had entered on some necessary public measures they would not hesitate a moment to think them unworthy of such a trust

Immediate necessity makes many things convenient which if continued would grow into oppressions Expedience and right are different things When the calamities of America required a consultation there was no method so ready or at that time so proper as to appoint persons from the several houses of Assembly for that purpose and the wisdom with which they have proceeded has preserved this continent from ruin But as it is more than probable that we shall never be without a Congress every well wisher to good order must own that the mode for choosing members of that body deserves consideration And I put it as a question to those who make a study of mankind whether representation and election is not too great a power for one and the same body of men to possess? When we are planning for posterity we ought to remember that virtue is not hereditary

It is from our enemies that we often gain excellent maxims

general execration, both by the Congress and the people Yet, as the domestic tranquillity of a nation depends greatly on the *chastity* of what may properly be called 'national manners" it is often better to pass some things over in silent disdain than to make use of such new methods of dislike as might introduce the least innovation on that guardian of our peace and safety And perhaps it is chiefly owing to this prudent delicacy that the King s speech has not before now suffered a public execution The speech if it may be called one is nothing better than a willful audacious libel against the truth the common good and the existence of mankind and is a formal and pompous method of offering up human sacrifices to the pride of tyrants But this general massacre of mankind is one of the privileges and the certain consequence of kings for as nature knows them *not* they know *not her*, and although they are beings of our *own* creating they know not *us*, and are become the gods of their creators The speech has one good quality which is that it is not calculated to deceive, neither can we even if we would be deceived by it Brutality and tyranny appear on the face of it It leaves us at no loss And every line convinces even in the moment of reading that he who hunts the woods for prey the naked and untutored Indian, is less savage than the king of Britain

Sir John Dalrymple the putative father of a whining jesuitical piece fallaciously called *The address of the people* of England *to the inhabitants* of America "[8] has perhaps from a vain supposition that the people *here* were to be frightened at the pomp and description of a king given (though very unwisely on his part) the real character of the present one But says this writer, ' if you are inclined to pay compl ments to an administration which we do not complain of (meaning the Marquis of Rockingham s[27] at the repeal of the Stamp Act) it is very unfair in you to withhold them from that prince *by whose nod alone they were permitted to do anything* This is toryism with a witness! Here is idolatry even without a mask and he who can calmly hear and digest such doctrine has forfeited his claim to rationality—an apostate from the order of manhood—and *ought to be* considered as one who has not only given up the proper dignity of man, but sunk

we had been driven to the necessity of breaking off all connections with her, at the same time assuring all such courts of our peaceable disposition toward them and of our desire of entering into trade with them—such a memorial would produce more good effects to this continent than if a ship were freighted with petitions to Britain

Under our present denomination of British subjects, we can neither be received nor heard abroad, the custom of all courts is against us, and will be so until, by an independence, we take rank with other nations

These proceedings may at first appear strange and difficult, but like all other steps which we have already passed over will in a little time become familiar and agreeable, and until an independence is declared, the continent will feel itself like a man who continues putting off some unpleasant business from day to day, yet knows it must be done, hates to set about it, wishes it over, and is continually haunted with the thoughts of its necessity

Appendix

Since the publication of the first edition of this pamphlet or rather, on the same day on which it came out, the King's speech[3] made its appearance in this city[a] Had the spirit of prophecy directed the birth of this production, it could not have brought it forth at a more seasonable juncture or at a more necessary time The bloody mindedness of the one shows[b] the necessity of pursuing the doctrine of the other Men read by way of revenge And the speech, instead of terrifying prepared a way for the manly principles of independence

Ceremony, and even silence, from whatever motive they may arise, have a hurtful tendency when they give the least degree of countenance to base and wicked performances wherefore if this maxim be admitted, it naturally follows that the King's speech as being a piece of finished villainy, deserved and still deserves a

[a] [Philadelphia.]
[b] [The New Edition has 'show']

merce and not the conquest of America by which England is to be benefited and that would in a great measure continue were the countries as independent of each other as France and Spain, be cause in many articles neither can go to a better market But it is the independence of this country of Britain, or any other, which is now the main and only object worthy of contention, and which, like all other truths discovered by necessity, will appear clear and stronger every day

First, because it will come to that one time or other

Secondly, because the longer it is delayed, the harder it will be to accomplish

I have frequently amused myself both in public and private companies with silently remarking the specious errors of those who speak without reflecting And among the many which I have heard the following seems the most general viz, that had this rupture happened forty or fifty years hence instead of now the continent would have been more able to have shaken off the dependence To which I reply that our military ability, *at this time*, arises from the experience gained in the last war,[33] and which in forty or fifty years time would have been totally extinct The con tinent would not by that time have had a general or even a military officer left and we or those who may succeed us would have been as ignorant of martial matters as the ancient Indians and this single position closely attended to will unanswerably prove that the present time is preferable to all others The argument turns thus At the conclusion of the last war we had experience but wanted numbers and forty or fifty years hence we shall have numbers without experience wherefore the proper point of time must be some particular point between the two extremes in which a suffi ciency of the former remains and a proper increase of the latter is obtained And that point of time is the present time

The reader will pardon this digression as it does not properly come under the head I first set out with and to which I again re turn by the following position viz

Should aff
governing ar

himself beneath the rank of animals, and contemptibly crawl through the world like a worm

However, it matters very little now what the King of England either says or does, he has wickedly broken through every moral and human obligation, trampled nature and conscience beneath his feet, and by a steady and constitutional spirit of insolence and cruelty procured for himself a universal hatred It is *now* the interest of America to provide for herself She has already a large and young family, whom it is more her duty to take care of than to be granting away her property to support a power who is become a reproach to the names of men and Christians—ye whose office it is to watch over the morals of a nation, of whatsoever sect or denomination ye are of, as well as ye who are more immediately the guardians of the public liberty, if ye wish to preserve your native country uncontaminated by European corruption ye must in secret wish a separation But leaving the moral part to private reflection, I shall chiefly confine my farther remarks to the following heads

First, that it is the interest of America to be separated from Britain

Secondly, which is the easiest and most practicable plan, reconciliation or independence? with some occasional remarks

In support of the first, I could, if I judged it proper, produce the opinion of some of the ablest and most experienced men on this continent, and whose sentiments on that head are not yet publicly known It is in reality a self-evident position for no nation in a state of foreign dependence limited in its commerce and cramped and fettered in its legislative powers can ever arrive at any material eminence America does not yet know what opulence is, and although the progress which she has made stands unparalleled in the history of other nations it is but childhood compared with what she would be capable of arriving at had she as she ought to have, the legislative powers in her own hands England is at this time proudly coveting what would do her no good were she to accomplish it, and the continent hesitating on a matter which will be her final ruin if neglected It is the com

merce and not the conquest of America by which England is to be benefited, and that would in a great measure continue were the countries as independent of each other as France and Spain, because in many articles neither can go to a better market But it is the independence of this country of Britain, or any other, which is now the main and only object worthy of contention, and which, like all other truths discovered by necessity, will appear clear and stronger every day

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as matters are

now circumstanced, (as it seems to be the point contended for) we shall deprive ourselves of the very means of sinking the debt we have or may contract. The value of the back lands, which some of the provinces are clandestinely deprived of, by the unjust extension of the limits of Canada,[9] valued only at five pounds sterling per hundred acres, amount to upwards of twenty-five millions, Pennsylvania currency; and the quit-rents at one penny sterling per acre, to two millions yearly.

It is by the sale of those lands that the debt may be sunk, without burthen to any, and the quit-rent reserved thereon will always lessen, and in time will wholly support the yearly expense of government. It matters not how long the debt is in paying, so that the lands when sold be applied to the discharge of it, and for the execution of which the Congress for the time being will be the continental trustees.

I proceed now to the second head, viz. which is the easiest and most practicable plan, reconciliation or independence; with some occasional remarks.

He who takes nature for his guide is not easily beaten out of his argument, and on that ground I answer generally, *that independence being a single simple line, contained within ourselves; and reconciliation a matter exceedingly perplexed and complicated, and in which a treacherous capricious court is to interfere, gives the answer without a doubt.*[1]

The present state of America is truly alarming to every man who is capable of reflection. Without law, without government, without any other mode of power than what is founded on, and granted by courtesy. Held together by an unexampled concurrence of sentiment, which is nevertheless subject to change, and which every secret enemy is endeavouring to dissolve. Our present condition is, legislation without law; wisdom without a plan; a constitution without a name; and, what is strangely astonishing, perfect independence contending for dependence. The instance is without a precedent, the case never existed before, and who can tell what may be the event?[2] The property of no man is secure in the present unbraced system of things. The mind of the multitude is left at random, and seeing no fixed object before them, they pursue such

as fancy or opinion presents Nothing is criminal, there is no such thing as treason, wherefore, everyone thinks himself at liberty to act as he pleases The Tories[30] dared not have assembled offensively had they known that their lives, by that act, were forfeited to the laws of the state A line of distinction should be drawn between English soldiers taken in battle and inhabitants of America taken in arms The first are prisoners, but the latter traitors The one forfeits his liberty, the other his head

Notwithstanding our wisdom, there is a visible feebleness in some of our proceedings which gives encouragement to dissensions The continental belt is too loosely buckled, and if something is not done in time, it will be too late to do anything and we shall fall into a state in which neither reconciliation nor independence will be practicable The king and his worthless adherents are got at their old game of dividing the continent, and there are not wanting among us printers who will be busy in spreading specious falsehoods The artful and hypocritical letter[31] which appeared a few months ago in two of the New York papers, and likewise in two others, is an evidence that there are men who want either judgment [or][1] honesty

It is easy getting into holes and corners and talking of reconciliation, but do such men seriously consider how difficult the task is, and how dangerous it may prove should the continent divide thereon? Do they take within their view all the various orders of men whose situation and circumstances, as well as their own, are to be considered therein? Do they put themselves in the place of the sufferer whose *all* is *already* gone and of the soldier who has quitted *all* for the defense of his country? If their ill judged moderation be suited to their own private situations only, regardless of others the event will convince them that "they are reckoning with out their host"

Put us, says some, on the footing we were on in sixty three,[32] to which I answer the request is not now in the power of Britain to comply with, neither will she propose it, but if it were and even should be granted I ask, as a reasonable question, By what means is such a corrupt and faithless court to be kept to its engagements?

[1] [The New Edition has "and."]

Another Parliament, nay, even the present, may hereafter repeal the obligation, on the pretense of its being violently obtained or unwisely granted, and in that case where is our redress? No going to law with nations, cannon are the barristers of crowns, and the sword, not of justice but of war, decides the suit To be on the footing of sixty-three, it is not sufficient that the laws only be put in[1] the same state but that our circumstances likewise be put in[1] the same state, our burnt and destroyed towns repaired or built up, our private losses made good, our public debts (contracted for defense) discharged, otherwise we shall be millions worse than we were at that enviable period Such a request, had it been complied with a year ago, would have won the heart and soul of the continent, but now it is too late "The Rubicon is passed"

Besides, the taking up arms merely to enforce the repeal of a pecuniary law seems as unwarrantable by the divine law and as repugnant to human feelings as the taking up arms to enforce obedience thereto The object, on either side, does not justify the means, for the lives of men are too valuable to be cast away on such trifles It is the violence which is done and threatened to our persons, the destruction of our property by an armed force, the invasion of our country by fire and sword which conscientiously qualifies the use of arms, and the instant in which such a mode of defense became necessary all subjection to Britain ought to have ceased, and the independence of America should have been considered as dating its era from and published by *the first musket that was fired against her* This line is a line of consistency, neither drawn by caprice nor extended by ambition, but produced by a chain of events of which the colonies were not the authors

I shall conclude these remarks with the following timely and well intended hints We ought to reflect that there are three different ways by which an independence may hereafter be effected, and that *one* of those *three* will, one day or other, be the fate of America, viz, by the legal voice of the people in Congress, by a military power, or by a mob It may not always happen that our soldiers are citizens and the multitude a body of reasonable men virtue, as I have already remarked, is not hereditary, neither is it

1 [The New Edition has 'on]

perpetual Should an independence be brought about by the first of those means, we have every opportunity and every encouragement before us to form the noblest, purest constitution on the face of the earth We have it in our power to begin the world over again A situation similar to the present has not happened since the days of Noah until now The birthday of a new world is at hand and a race of men, perhaps as numerous as all Europe contains are to receive their portion of freedom from the event of a few months The reflection is awful, and in this point of view how trifling how ridiculous, do the little paltry cavilings of a few weak or interested men appear when weighed against the business of a world

Should we neglect the present favorable and inviting period, and independence be hereafter effected by any other means, we must charge the consequence to ourselves, or to those rather whose narrow and prejudiced souls are habitually opposing the measure, without either inquiring or reflecting There are reasons to be given in support of independence which men should rather privately think of than be publicly told of We ought not now to be debating whether we shall be independent or not, but anxious to accomplish it on a firm, secure and honorable basis, and uneasy rather that it is not yet begun[1] upon Every day convinces us of its necessity Even the Tories (if such beings yet remain among us) should, of all men, be the most solicitous to promote it for as the appointment of committees at first protected them from popular rage, so a wise and well-established form of government will be the only certain means of continuing it securely to them Wherefore, if they have not virtue enough to be Whigs, they ought to have prudence enough to wish for independence

In short independence is the only bond that can tie and keep us together We shall then see our object and our ears will be legally shut against the schemes of an intriguing as well as a cruel enemy We shall then too be on a proper footing to treat with Britain for there is reason to conclude that the pride of that court will be less hurt by treating with the American states for terms of peace than with those whom she denominates 'rebellious subjects for

[1] [The New Edition has "b gan"]

terms of accommodation It is our delaying it that encourages her to hope for conquest, and our backwardness tends only to prolong the war As we have, without any good effect therefrom, withheld our trade to obtain a redress of our grievances, let us now try the alternative, by independently redressing them ourselves and then offering to open the trade The mercantile and reasonable part of England will be still with us, because peace with trade is preferable to war without it And if this offer be not accepted, other courts may be applied to

On these grounds I rest the matter And as no offer has yet been made to refute the doctrine contained in the former editions of this pamphlet, it is a negative proof that either the doctrine cannot be refuted or that the party in favor of it are too numerous to be opposed Wherefore, instead of gazing at each other with suspicious or doubtful curiosity, let each of us hold out to his neighbor the hearty hand of friendship and unite in drawing a line which like an act of oblivion, shall bury in forgetfulness every former dissension Let the names of Whig and Tory be extinct, and let none other be heard among us than those of *a good citizen, an open and resolute friend, and a virtuous supporter of the rights of mankind and of the free and independent states of America*

THE AMERICAN CRISIS

[ONE AND THIRTEEN]

THE AMERICAN CRISIS: I

THESE ARE THE TIMES that try men's souls The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country, but he that stands it *now* deserves the love and thanks of man and woman Tyranny, like hell, is not easily conquered yet we have this consolation with us that, the harder the conflict, the more glorious the triumph What we obtain too cheap we esteem too lightly, it is dearness only that gives everything its value Heaven knows how to put a proper price upon its goods and it would be strange indeed if so celestial an article as freedom should not be highly rated Britain, with an army to enforce her tyranny, has declared that she has a right (*not only to tax*) but *to bind us in all cases whatsoever*,[1] and if being *bound in that manner* is not slavery, then is there not such a thing as slavery upon earth Even the expression is impious, for so unlimited a power can belong only to God

Whether the independence of the continent was declared too soon or delayed too long I will not now enter into as an argument, my own simple opinion is that had it been eight months earlier, it would have been much better We did not make a proper use of last winter neither could we while we were in a dependent state However the fault if it were one was all our own,[*] we have none to blame but ourselves But no great deal is lost yet All that Howe has been doing for this month past is rather a ravage than a conquest which the spirit of the Jerseys,[2] a year ago, would have quickly repulsed, and which time and a little resolution will soon recover

I have as little superstition in me as any man living, but my

[*] The present [illegible] fected the whole c[illegible] that man does not [illegible] means of sacrifici[illegible]

secret opinion has ever been and still is that God Almighty will not give up a people to military destruction or leave them unsupportedly to perish who have so earnestly and so repeatedly sought to avoid the calamities of war by every decent method which wisdom could invent Neither have I so much of the infidel in me as to suppose that He has relinquished the government of the world and given us up to the care of devils, and as I do not I cannot see on what grounds the King of Britain can look up to heaven for help against us, a common murderer, a highwayman, or a housebreaker has as good a pretense as he

Tis *surprising to see how rapidly a panic will sometimes* run through a country All nations and ages have been subject to them Britain has trembled like an ague at the report of a French fleet *of flat bottomed boats*, and in the fourteenth[b] century *the whole* English army, after ravaging the kingdom of France, was driven back like men petrified with fear, and this brave exploit was performed by a few broken forces collected and headed by a woman Joan of Arc Would that heaven might inspire some Jersey maid to spirit up her countrymen and save her fair fellow sufferers from ravage and ravishment! Yet panics in some cases have their uses, they produce as much good as hurt Their duration is always short the mind soon grows through them and acquires a firmer habit than before But their peculiar advantage is that they are the touchstones of sincerity and hypocrisy and bring things and men to light which might otherwise have lain forever undiscovered In fact, they have the same effect on secret traitors which an imaginary apparition would have upon a private murderer They sift out the hidden thoughts of man and hold them up in public to the world Many a disguised Tory has lately shown his head that shall penitentially solemnize with curses the day on which Howe arrived upon the Delaware

As I was with the troops at Fort Lee[3] and marched with them to the edge of Pennsylvania I am well acquainted with many circumstances which those who live at a distance know but little or nothing of Our situation there was exceedingly cramped the place being a narrow neck of land between the North River[4] and the

b [The fifteenth century]

Hackensack Our force was inconsiderable being not one fourth so great as Howe could bring against us We had no army at hand to have relieved the garrison had we shut ourselves up and stood on our defense Our ammunition, light artillery, and the best part of our stores had been removed on the apprehension that Howe would endeavor to penetrate the Jerseys in which case Fort Lee could be of no use to us for it must occur to every thinking man whether in the army or not that these kind of field forts are only for temporary purposes and last in use no longer than the enemy directs his force against the particular object which such forts are raised to defend Such was our situation and condition at Fort Lee on the morning of the twentieth of November, when an officer arrived with information that the enemy with two hundred boats had landed about seven miles above Major General Greene[5] who commanded the garrison immediately ordered them under arms and sent express to General Washington at the town of Hackensack distant by the way of the ferry=six miles Our first object was to secure the bridge over the Hackensack which laid up the river between the enemy and us about six miles from us and three from them General Washington arrived in about three quarters of an hour and marched at the head of the troops toward the bridge which place I expected we should have a brush for, however [illegible]

I

bridge and the ferry and made their way through some marshy grounds up to the town of Hackensack and there passed the river We brought off as much baggage as the wagons could contain the rest was lost The simple object was to bring off the garrison and march them on till they could be strengthened by the Jersey or Pennsylvania militia so as to be enabled to make a stand. We stayed four days at Newark collected our outposts with some of the Jersey militia and marched out twice to meet the enemy on being informed that they were advancing though our numbers were greatly inferior to theirs Howe in my little opinion committed a great error in generalship in not throwing a body of forces off from Staten Island through Amboy, by which means he might

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[b] [The fifteenth century]

enough to join him Howe is as much deceived by you as the American cause is injured by you He expects you will all take up arms and flock to his standard, with muskets on your shoulders Your opinions are of no use to him unless you support him personally, for 'tis soldiers and not Tories that he wants

I once felt all that kind of anger which a man ought to feel against the mean principles that are held by the Tories a noted one, who kept a tavern at Amboy, was standing at his door with as pretty a child in his hand, about eight or nine years old, as I ever saw, and after speaking his mind as freely as he thought was prudent finished with this unfatherly expression, "Well! give me peace in my day " Not a man lives on the continent but fully believes that a separation must some time or other finally take place, and a generous parent should have said, 'If there must be trouble, let it be in my day that my child may have peace,' and this single reflection, well applied is sufficient to awaken every man to duty Not a place upon earth might be so happy as America Her situation is remote from all the wrangling world, and she has nothing to do but to trade with them A man can distinguish himself between temper and principle, and I am as confident as I am that God governs the world that America will never be happy till she gets clear of foreign dominion Wars without ceasing will break out till that period arrives, and the continent must in the end be conqueror for though the flame of liberty may sometimes cease to shine the coal can never expire

America did not nor does not want force, but she wanted a proper application of that force Wisdom is not the purchase of a day and it is no wonder that we should err at the first setting off From an excess of tenderness we were unwilling to raise an army and trusted our cause to the temporary defense of a well meaning militia A summer's experience has now taught us better, yet with those troops while they were collected we were able to set bounds to the progress of the enemy and thank God! they are again assembling I always considered militia as the best troops in the world for a sudden exertion but they will not do for a long campaign Howe it is probable will make an attempt on this city, should he fail on this side of the Delaware, he is ruined If he

have seized all our stores at Brunswick and intercepted our march into Pennsylvania, but if we believe the power of hell to be limited, we must likewise believe that their agents are under some providential control.

I shall not now attempt to give all the particulars of our retreat to the Delaware; suffice it for the present to say that both officers and men, though greatly harassed and fatigued, frequently without rest, covering, or provision—the inevitable consequences of a long retreat—bore it with a manly and martial spirit. All their wishes centered in one, which was that the country would turn out and help them to drive the enemy back. Voltaire[6] has remarked that King William[7] never appeared to full advantage but in difficulties and in action; the same remark may be made on General Washington, for the character fits him. There is a natural firmness in some minds which cannot be unlocked by trifles, but which when unlocked, discovers a cabinet of fortitude; and I reckon it among those kind of public blessings which we do not immediately see that God has blessed him with uninterrupted health and given him a mind that can even flourish upon care.

I shall conclude this paper with some miscellaneous remarks on the state of our affairs and shall begin with asking the following questions. Why is it that the enemy have left the New England provinces, and made these middle ones the seat of war? The answer is easy: New England is not infested with Tories, and we are. I have been tender in raising the cry against these men and used numberless arguments to show them their danger, but it will not do to sacrifice a world either to their folly or their baseness. The period is now arrived in which either they or we must change our sentiments, or one or both must fall. And what is a Tory? Good God! what is he? I should not be afraid to go with a hundred Whigs against a thousand Tories, were they to attempt to get into arms. Every Tory is a coward, for a servile, slavish, self-interested fear is the foundation of Toryism; and a man under such influence, though he may be cruel, never can be brave.

But before the line of irrecoverable separation be drawn between us, let us reason the matter together. Your conduct is an invitation to the enemy, yet not one in a thousand of you has heart

and the back, the rich and the poor will suffer or rejoice alike The heart that feels not now is dead, the blood of his children will curse his cowardice who shrinks back at a time when a little might have saved the whole and made *them* happy I love the man that can smile in trouble, that can gather strength from distress and grow brave by reflection 'Tis the business of little minds to shrink, but he whose heart is firm and whose conscience approves his conduct will pursue his principles unto death My own line of reasoning is to myself as straight and clear as a ray of light Not all the treasures of the world, so far as I believe, could have induced me to support an offensive war, for I think it murder, but if a thief breaks into my house, burns and destroys my property, and kills or threatens to kill me or those that are in it and to bind me in all cases whatsoever to his absolute will am I to suffer it? What signifies it to me whether he who does it is a king or a common man, my countryman or not my countryman, whether it be done by an individual villain or an army of them? If we reason to the root of things, we shall find no difference, neither can any just cause be assigned why we should punish in the one case and pardon in the other Let them call me rebel and welcome I feel no concern from it but I should suffer the misery of devils were I to make a whore of my soul by swearing allegiance to one whose character is that of a sottish, stupid stubborn worthless brutish man I conceive likewise a horrid idea in receiving mercy from a being who at the last day, shall be shrieking to the rocks and mountains to cover him and fleeing with terror from the orphan the widow and the slain of America

There are cases which cannot be overdone by language, and this is one There are persons too *who see not the full* extent of the evil which threatens them they solace themselves with hopes that the enemy if he succeed, will be merciful [illegible]

[illegible] of the fox is as murderous as the violence of the wolf and we ought to guard equally against both Howe's first object is partly by *threats and* partly by promises, to terrify or seduce the people to deliver up *their arms* and receive mercy

succeeds, our cause is not ruined He stakes all on his side against a part on ours, admitting he succeeds, the consequence will be that armies from both ends of the continent will march to assist *their suffering friends in the middle states, for he cannot go every* where, it is impossible I consider Howe as the greatest enemy the Tories have, he is bringing a war into their country, which had it not been for him and partly for themselves, they had been clear of Should he now be expelled, I wish with all the devotion of a *Christian that the* names of Whig and Tory may never more be mentioned, but should the Tories give him encouragement to come or assistance if he come, I as sincerely wish that our next year's arms may expel them from the continent, and the Congress appropriate their possessions to the relief of those who have suffered in well doing A single successful battle next year will settle the whole America could carry on a two years' war by the confiscation of the property of disaffected persons and be made happy by their expulsion Say not that this is revenge, call it rather the soft resentment of a suffering people who, having no object in view but the *good* of *all,* have staked their *own all* upon a seemingly doubtful event Yet it is folly to argue against determined hardness eloquence may strike the ear and the language of sorrow draw forth the tear of compassion, but nothing can reach the heart that is *steeled with prejudice*

Quitting this class of men, I turn with the warm ardor of a friend to those who have nobly stood and are yet determined to stand the matter out, I call not upon a few but upon all—not on *this* state or *that* state but on *every* state—up and help us, lay your shoulders to the wheel better have too much force than too little when so great an object is at stake Let it be told to the future world that in the depth of winter when nothing but hope *and virtue could survive, that the city and the country,* alarmed at one common danger came forth to meet and to repulse it Say not that thousands are gone, turn out your tens of thousands, throw not the burden of the day upon Providence, but "show your *faith by your works,"* [9] *that God may bless you* It matters not where you live or what rank of life you hold, the evil or the blessing will reach you all The far and the near, the home counties

may know it By perseverance and fortitude we have the prospect of a glorious issue, by cowardice and submission, the sad choice of a variety of evils—a ravaged country, a depopulated city, habitations without safety and slavery without hope, our homes turned into barracks and bawdy houses for Hessians,[12] and a future race to provide for whose fathers we shall doubt of Look on this picture and weep over it! and if there yet remains one thoughtless wretch who believes it not, let him suffer it unlamented

COMMON SENSE

December 23 1776[13]

The ministry recommended the same plan to Gage,[10] and this is what the Tories call making their peace, "a peace which passeth all understanding" *indeed*![11] A peace which would be the immediate forerunner of a worse ruin than any we have yet thought of Ye men of Pennsylvania, do reason upon these things! Were the back counties to give up their arms, they would fall an easy prey to the Indians, who are all armed this perhaps is what some Tories would not be sorry for Were the home counties to deliver up their arms, they would be exposed to the resentment of the back counties, who would then have it in their power to chastise their defection at pleasure And were any one state to give up its arms, *that* state must be garrisoned by all Howe's army of Britons and Hessians to preserve it from the anger of the rest Mutual fear is the principal link in the chain of mutual love, and woe be to that state that breaks the compact Howe is mercifully inviting you to barbarous destruction, and men must be either rogues or fools that will not see it I dwell not upon the vapors of imagination I bring reason to your ears and, in language as plain as A, B, C, hold up truth to your eyes

I thank God that I fear not I see no real cause for fear I know our situation well and can see the way out of it While our army was collected Howe dared not risk a battle and it is no credit to him that he decamped from the White Plains and waited a mean opportunity to ravage the defenseless Jerseys but it is great credit to us that, with a handful of men, we sustained an orderly retreat for near a hundred miles brought off our ammunition all our field pieces the greatest part of our stores and had four rivers to pass None can say that our retreat was precipitate, for we were near three weeks in performing it, that the country might have time to come in Twice we marched back to meet the enemy and remained out till dark The sign of fear was not seen in our camp and had not some of the cowardly and disaffected inhabitants spread false alarms through the country the Jerseys had never been ravaged Once more we are again collected and collecting, our new army at both ends of the continent is recruiting fast, and we shall be able to open the next campaign with sixty thousand men, well armed and clothed This is our situation, and who will

Never, I say, had a country so many openings to happiness as this Her setting out in life, like the rising of a fair morning, was unclouded and promising Her cause was good Her principles just and liberal Her temper serene and firm Her conduct regulated by the nicest steps, and everything about her wore the mark of honor It is not every country (perhaps there is not another in the world) that can boast so fair an origin Even the first settlement of America corresponds with the character of the revolution Rome, once the proud mistress of the universe, was originally a band of ruffians Plunder and rapine made her rich, and her oppression of millions made her great But America need never be ashamed to tell her birth, nor relate the stages by which she rose to empire

The remembrance, then, of what is past, if it operates rightly, must inspire her with the most laudable of all ambition, that of adding to the fair fame she began with The world has seen her great in adversity struggling, without a thought of yielding, beneath accumulated difficulties, bravely, nay proudly, encountering distress and rising in resolution as the storm increased All this is justly due to her, for her fortitude has merited the character Let then the world see that she can bear prosperity and that her honest virtue in time of peace is equal to the bravest virtue in time of war

She is now descending to the scenes of quiet and domestic life Not beneath the cypress shade of disappointment, but to enjoy in her own land and under her own vine the sweet of her labors and the reward of her toil In this situation, may she never forget that a fair national reputation is of as much importance as independence That it possesses a charm that wins upon the world and makes even enemies civil That it gives a dignity which is often superior to power, and commands reverence where pomp and splendor fail

It would be a circumstance ever to be lamented and never to be forgotten were a single blot from any cause whatever, suffered to fall on a revolution which to the end of time must be an honor to the age that accomplished it, and which has contributed more to enlighten the world and diffuse a spirit of freedom and lib

THE AMERICAN CRISIS XIII

THOUGHTS ON THE PEACE AND THE PROBABLE ADVANTAGES THEREOF

"THE TIMES that tried men's souls" [a] are over, and the greatest and completest revolution the world ever knew gloriously and happily accomplished

But to pass from the extremes of danger to safety, from the tumult of war to the tranquillity of peace, though sweet in contemplation, requires a gradual composure of the senses to receive it Even calmness has the power of stunning, when it opens too instantly upon us The long and raging hurricane that should cease in a moment would leave us in a state rather of wonder than enjoyment, and some moments of recollection must pass before we could be capable of tasting the felicity of repose There are but few instances in which the mind is fitted for sudden transitions, it takes in its pleasures by reflection and comparison, and those must have time to act before the relish for new scenes is complete

In the present case, the mighty magnitude of the object the various uncertainties of fate it has undergone, the numerous and complicated dangers we have suffered or escaped, the eminence we now stand on, and the vast prospect before us must all conspire to impress us with contemplation

To see it in our power to make a world happy, to teach mankind the art of being so, to exhibit on the theater of the universe a character hitherto unknown, and to have, as it were, a new creation entrusted to our hands are honors that command reflection and can neither be too highly estimated nor too gratefully received

In this pause then of recollection, while the storm is ceasing and the long agitated mind vibrating to a rest, let us look back on the scenes we have passed and learn from experience what is yet to be done

[a] These are the times that try mens souls" *The Crisis No I,* published December 1776 [See p 55]

With the blessings of peace, independence, and a universal commerce, the states, individually and collectively, will have leisure and opportunity to regulate and establish their domestic concerns and to put it beyond the power of calumny to throw the least reflection on their honor Character is much easier kept than recovered, and that man—if any such there be—who, from sinister views or littleness of soul, lends unseen his hand to injure it contrives a wound it will never be in his power to heal

As we have established an inheritance for posterity, let that inheritance descend with every mark of an honorable conveyance The little it will cost, compared with the worth of the states, the greatness of the object, and the value of the national character, will be a profitable exchange

But that which must more forcibly strike a thoughtful, penetrating mind, and which includes and renders easy all inferior concerns is the *union of the states* On this our great national character depends It is this which must give us importance abroad and security at home It is through this only that we are or

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While I was writing this note I cast my eye on the pamphlet *Common Sense* from which I shall make an extract as it exactly applies to the case It is as follows

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"It is not in numbers but in a union that o

erality among mankind than any human event (if this may be called one) that ever preceded it

It is not among the least of the calamities of a long-continued war that it unhinges the mind from those nice sensations which at other times appear so amiable The continual spectacle of woe blunts the finer feelings, and the necessity of bearing with the sight renders it familiar In like manner are many of the moral obligations of society weakened, till the custom of acting by necessity becomes an apology where it is truly a crime Yet let but a nation conceive rightly of its character, and it will be chastely just in protecting it None ever began with a fairer than America and none can be under a greater obligation to preserve it

The debt which America has contracted, compared with the cause she has gained, and the advantages to flow from it, ought scarcely to be mentioned She has it in her choice to do and to *live as happily* as she pleases *The world is in her hands She has* no foreign power to monopolize her commerce, perplex her legislation, or control her prosperity The struggle is over, which must one day have happened, and perhaps, never could have happened at a *better time*[b] *And instead of a domineering master*, she has gained an *ally* whose exemplary greatness and universal liberality have extorted a confession even from her enemies

[b] That the revolution began at the exact period of time best fitted to the purpose is sufficiently proved by the event But the great hinge on which the whole machine turned is the union of the states and this union was naturally produced by the inability of any one state to support itself against any foreign enemy without the assistance of the rest

Had the states severally been less able than they were when the war began *their united strength would not have been equal to the undertaking* and they must in all human probability have failed And on the other hand had they severally been more able they might not have seen or what is more might not have felt the necessity of uniting and either by attempting to stand alone or in small confederacies would have been separately conquered

Now as we cannot see a time (and many years must pass away before it can arrive) when the strength of any one state or several united can be equal to the whole of the present United States and as we have seen the extreme difficulty of collectively prosecuting the war to a successful issue and preserving our national importance in the world therefore from the experience we have had and the knowledge we have gained we must unless we make a waste of

With the blessings of peace independence and a universal commerce the states individually and collectively will have leisure and opportunity to regulate and establish their domestic concerns and to put it beyond the power of calumny to throw the least reflection on their honor Character is much easier kept than recovered and that man—if any such there be—who from sinister views or littleness of soul lends unseen his hand to injure it contrives a wound it will never be in his power to heal

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"It is not in numbers but in a union that our pre

on Sense as given on pages 34 f of this edition apparently represent Paine's improvement on this earlier work.]

can be nationally known in the world, it is the flag of the United States which renders our ships and commerce safe on the seas or in a foreign port Our Mediterranean passes must be obtained under the same style All our treaties, whether of alliance, peace or commerce, are formed under the sovereignty of the United States, and Europe knows us by no other name or title

The division of the empire into states is for our own convenience, but abroad this distinction ceases The affairs of each state are local They can go no further than to itself And were the whole worth of even the richest of them expended in revenue, it would not be sufficient to support sovereignty against a foreign attack In short, we have no other national sovereignty than as United States It would even be fatal for us if we had—too expensive to be maintained and impossible to be supported Individuals or individual states may call themselves what they please, but the world, and especially the world of enemies, is not to be held in awe by the whistling of a name Sovereignty must have power to protect all the parts that compose and constitute it, and as *United States* we are equal to the importance of the title, but otherwise we are not *Our union, well and wisely regulated* and cemented, is the cheapest way of being great, the easiest way of being powerful, and the happiest invention in government which the circumstances of America can admit of Because it collects from each state that which, by being inadequate, can be of no use to it, and forms an aggregate that serves for all

The states of Holland are an unfortunate instance of the effects of individual *sovereignty Their disjointed condition* exposes them to numerous intrigues, losses, calamities, and enemies, and the almost impossibility of bringing their measures to a decision, and that decision into execution, is to them, and would be to us, a source of endless misfortune

It is with confederated states as with individuals in society something must be yielded up to make the whole secure In this view of things we gain by what we give and draw an annual interest greater than the capital I ever feel myself hurt when I hear the union, that great palladium of our liberty and safety, the least irreverently spoken of It is the most sacred thing in the

constitution of America and that which every man should be most proud and tender of Our citizenship in the United States is our national character Our citizenship in any particular state is only our local distinction By the latter we are known at home, by the former to the world Our great title is *Americans*, our inferior one varies with the place

So far as my endeavors could go, they have all been directed to conciliate the affections, unite the interests, and draw and keep the mind of the country together, and the better to assist in this foundation work of the revolution, I have avoided all places of profit or office, either in the state I live in or in the United States,[1] kept myself at a distance from all parties and party connections, and even disregarded all private and inferior concerns, and when we take into view the great work which we have gone through and feel, as we ought to feel the just importance of it, we shall then see that the little wranglings and indecent contentions of personal parley are as dishonorable to our characters as they are injurious to our repose

It was the cause of America that made me an author The force with which it struck my mind and the dangerous condition the country appeared to me in, by courting an impossible and an unnatural reconciliation with those who were determined to reduce her, instead of striking out into the only line that could cement and save her—*a declaration of independence*—made it impossible for me, feeling as I did to be silent
of more than seven
likewise added some
and disinterestedly employing it in the great cause of mankind and showing that there may be genius without prostitution

Independence always appeared to me practicable and probable, provided the sentiment of
to the object and there is
so extended and wedded to
such a variety of circumstances were so instantly and effectually pervaded by a turn in politics as in the case of independence, and who supported their opinion, undiminished, through such a succession of good and ill fortune till they crowned it with success

But as the scenes of war are closed and every man preparing for home and happier times, I therefore take my leave of the subject I have most sincerely followed it from beginning to end and through all its turns and windings, and whatever country I may hereafter be in, I shall always feel an honest pride at the part I have taken and acted, and a gratitude to nature and providence for putting it in my power to be of some use to mankind

COMMON SENSE

Philadelphia, April 19, 1783 [2]

RIGHTS OF MAN

SELECTIONS FROM
PARTS ONE AND TWO

RIGHTS OF MAN

PART ONE

TO GEORGE WASHINGTON

PRESIDENT OF THE UNITED STATES OF AMERICA

Sir, I present you a small treatise in defense of those principles of freedom which your exemplary virtue has so eminently contributed to establish. That the rights of man may become as universal as your benevolence can wish, and that you may enjoy the happiness of seeing the New World regenerate the Old, is the prayer of,

Sir,
Your much obliged and
obedient humble servant,
Thomas Paine

[Of the Limits of Constitutional Law]

Among the incivilities by which nations or individuals provoke and irritate each other, Mr Burke's pamphlet on the French Revolution is an extraordinary instance Neither the people of France nor the National Assembly were troubling themselves about the affairs of England or the English Parliament, and that Mr Burke should commence an unprovoked attack upon them, both in Parliament and in public, is a conduct that cannot be pardoned on the score of manners nor justified on that of policy There is scarcely an epithet of abuse to be found in the English language with which Mr Burke has not loaded the French nation and the National Assembly Everything which rancor, prejudice, ignorance, or knowledge could suggest are poured forth in the copious fury of near four hundred pages In the strain and on the plan Mr Burke was writing, he might have written on to as many thousands When the tongue or the pen is let loose in a frenzy of passion, it is the man and not the subject that becomes exhausted

Hitherto Mr Burke has not been mistaken and disappointed in the opinions he had formed of the affairs of France, but such is the ingenuity of his hope, or the malignancy of his despair, that it furnishes him with new pretenses to go on There was a time when it was impossible to make Mr Burke believe there would be any revolution in France His opinion then was that the French had neither spirit to undertake it nor fortitude to support it, and now that there is one he seeks an escape by condemning it

Not sufficiently content with abusing the National Assembly, a great part of his work is taken up with abusing Dr Price [1] (one of the best hearted men that lives) and the two societies in England known by the name of the Revolution Society and the Society for Constitutional Information [2]

Dr Price had preached a sermon on the fourth of November, 1789, being the anniversary of what is called in England the Revolution, which took place in 1688 Mr Burke, speaking of this sermon, says,

The political divine proceeds dogmatically to assert that, by the principles of the Revolution the people of England have acquired th ee fundamental rights

1 To choose our own governors
2 To cash er them for misconduct
3 To frame a government for ourselves

Dr Pr ce does not say that the right to do these things exists in this or in that person or in this or in that description of per sons but that it exists in the *whole*, that it is a right resident in the nation Mr Burke on the contrary denies that such a right exists in the nation either in whole or in part or that it exists anywhere and what is still more strange and marvelous he says that the people of England utterly disclaim such a right, and that they will resist the practical assertion of it with their lives and fortunes

That men should take up arms and spend their lives and for tunes not to maintain their rights but to maintain they have *not* rights is an entirely new species of discovery and suited to the paradoxical genius of Mr Burke

The method which Mr Burke takes to prove that the people of England had no such rights and that such rights do not now exist in the nation either in whole or in part or anywhere at all *is of* the same marvelous and monstrous kind with what he has already said for his arguments are that the persons or the genera tion of persons in whom they did exist are dead and with them *the right* is dead aLo

To prove this he quotes a declaration made by Parliament about a hundred years ago to Will am and Mary, in these words The Lords Spiritual and Temporal and Commons, do, in the name of the *people aforesaid* (meaning the people of England then living) most humbly and faithfully *submit* themselves their *heirs* and *posterities forever* He also quotes a clause of another act of Parliament made in the *same reign* the terms of which he says "bind us (meaning the people of that day), ' our *he rs* and our *posterity*, to *them* their *heirs* and *posterity*, to the end of time

Mr Burke conceives his point sufficiently established by pro

ducing these clauses, which he enforces by saying that they exclude the right of the nation *forever* And not yet content with making such declarations, repeated over and over again, he further says "that if the people of England possessed such a right before the Revolution" (which he acknowledges to have been the case, not only in England but throughout Europe, at an early period), "yet that the *English nation* did, at the time of the Revolution, most solemnly renounce and abdicate it, for themselves, and for *all their posterity, forever*"

As Mr Burke occasionally applies the poison drawn from his horrid principles, not only to the English nation, but to the French Revolution and the National Assembly, and charges that august illuminated, and illuminating body of men with the epithet of "usurpers," I shall, *sans cérémonie*, place another system of principles in opposition to his

The English Parliament of 1688 did a certain thing which, for *themselves and their constituents, they had a right to do* and which it appeared right should be done But in addition to this right, which they possessed by delegation, *they set up another right by assumption*, that of binding and controlling posterity to the end of time

The case, therefore, divides itself into two parts the right which they possessed by delegation, and the right which they set up by assumption The first is admitted, but with respect to the second, I reply

There never did, there never will, and there never can exist a Parliament, or any description of men, or any generation of men, in any country, possessed of the right or the power of binding and controlling posterity to the 'end of time' or of commanding forever how the world shall be governed or who shall govern *it*, and therefore all such clauses acts, or declarations by which the *makers of them attempt to do what they have neither the right nor the power to do, nor the power to execute, are in themselves* null and void

Every age and generation must be as free to act for itself, *in all cases*, as the ages and generation which preceded it The vanity

and presumption of governing beyond the grave is the most ridiculous and insolent of all tyrannies

Man has no property in man, neither has any generation a property in the generations which are to follow The Parliament or the people of 1688, or of any other period, had no more right to dispose of the people of the present day, or to bind or to control them *in any shape whatever*, than the Parliament or the people of the present day have to dispose of, bind, or control those who are to live a hundred or a thousand years hence

Every generation is and must be competent to all the purposes which its occasions require It is the living, and not the dead, that are to be accommodated When man ceases to be, his power and his wants cease with him, and having no longer any participation in the concerns of this world, he has no longer any authority in directing who shall be its governors, or how its government shall be organized or how administered

I am not contending for nor against any form of government, nor for nor against any party here or elsewhere That which a whole nation chooses to do it has a right to do Mr Burke says, No Where then does the right exist? I am contending for the *rights of the living*, and against their being willed away and controlled and contracted for by the manuscript assumed authority of the dead, and Mr Burke is contending for the *authority of the dead* over the rights and freedom of the living

There was a time when kings disposed of their crowns by will upon their deathbeds and consigned the people, like beasts of the field, to whatever successor they appointed This is now so exploded as scarcely to be remembered and so monstrous as hardly to be believed But the parliamentary clauses upon which Mr Burke builds his political church are of the same nature

The laws of every country must be analogous to some common principle In England, no parent or master, nor all the authority of [illegible]

Those who have quitted the world and those who are not yet arrived in it are as remote from each other as the utmost stretch of moral imagination can conceive What possible obligation then can exist between them, what rule or principle can be laid down that two nonentities, the one out of existence and the other not in and who never can meet in this world, that the one should control the other to the end of time?

In England, it is said that money cannot be taken out of the pockets of the people without their consent But who authorized or who could authorize the Parliament of 1688 to control and take away the freedom of posterity, and limit and confine their right of acting in certain cases forever, who were not in existence to give or to withhold their consent?

A greater absurdity cannot present itself to the understanding of man than what Mr Burke offers to his readers He tells them and he tells the world to come that a certain body of men who existed a hundred years ago made a law and that there does not now exist in the nation nor ever will nor ever can, a power to alter it Under how many subtilties or absurdities has the divine right to govern been imposed on the credulity of mankind! Mr Burke has discovered a new one and he has shortened his journey to Rome by appealing to the power of this infallible Parliament of former days and he produces what it has done as of divine authority for that power must certainly be more than human which no human power to the end of time can alter

But Mr Burke has done some service not to his cause but to his country by bringing those clauses into public view They serve to demonstrate how necessary it is at all times to watch against the attempted encroachment of power and to prevent its running to excess

It is somewhat extraordinary that the offense for which James II [3] was expelled, that of setting up power by *assumption* should be re acted *under another shape and form by the Parliament that* expelled him It shows that the rights of man were but imperfectly understood at the Revolution for certain it is that the right which that Parliament set up by *assumption* (for by delegation it had it not, and could not have it becaus

the persons and freedom of posterity forever was the same tyrannical unfounded kind which James attempted to set up over the Parliament and the nation, and for which he was expelled

The only difference is (for in principle they differ not) that the one was a usurper over the living and the other over the unborn, and as the one has no better authority to stand upon than the other, both of them must be equally null and void, and of no effect

From what, or from whence, does Mr Burke prove the right of any human power to bind posterity forever? He has produced his clauses, but he must produce also his proofs that such a right existed and show how it existed If it ever existed, it must now exist, for whatever appertains to the nature of man cannot be annihilated by man

It is the nature of man to die and he will continue to die as long as he continues to be born But Mr Burke has set up a sort of political Adam in whom all posterity are bound forever, he must therefore prove that his Adam possessed such a power or such a right

The weaker any cord is the less it will bear to be stretched and the worse is the policy to stretch it unless it is intended to break it Had a person contemplated the overthrow of Mr Burke's positions he would have proceeded as Mr Burke has done He would have magnified the authorities on purpose to have called the *right* of them into question and the instant the question of right was started the authorities must have been given up

It requires but a very small glance of thought to perceive that although laws made in one generation often continue in force through succeeding generations yet they continue to derive their force from the consent of the living A law not repealed continues in force not because it cannot be repealed, but because it is not repealed and the nonrepealing passes for consent

But Mr Burke's clauses have not even this qualification in their favor They become null by attempting to become immortal The nature of them precludes consent They destroy the right which they *might* have by grounding it on a right which they *cannot* have Immortal power is not a human right, and therefore cannot be a right of Parliament

Those who have quitted the world and those who are not yet arrived in it are as remote from each other as the utmost stretch of moral imagination can conceive. What possible obligation, then, can exist between them; what rule or principle can be laid down that two nonentities, the one out of existence and the other not in, and who never can meet in this world, that the one should control the other to the end of time?

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does, then he must mean that there are no such things as rights anywhere and that he has none himself, for who is there in the world but man? But if Mr Burke means to admit that man has rights, the question then will be, what are those rights, and how came man by them originally?

The error of those who reason by precedents drawn from antiquity, respecting the rights of man, is that they do not go far enough into antiquity They do not go the whole way They stop in some of the intermediate stages of a hundred or a thousand years and produce what was then done as a rule for the present day This is no authority at all

If we travel still further into antiquity, we shall find a directly contrary opinion and practice prevailing, and if antiquity is to be authority, a thousand such authorities may be produced, successively contradicting each other, but if we proceed on, we shall at last come out right we shall come to the time when man came from the hand of his Maker What was he then? Man Man was his high and only title, and a higher cannot be given him But of titles I shall speak hereafter

We have now arrived at the origin of man and at the origin of his rights As to the manner in which the world has been governed from that day to this it is no further any concern of ours than to make a proper use of the errors or the improvements which the history of it presents Those who lived a hundred or a thousand years ago were then moderns as we are now They had *their* ancients, and those ancients had others, and we also shall be ancients in our turn

If the mere name of antiquity is to govern in the affairs of life, the people who are to live a hundred or a thousand years hence may as well take us for a precedent, as we make a precedent of those who lived a hundred or a thousand years ago

The fact is that portions of antiquity, by proving everything, establish nothing It is authority against authority all the way, *till* we come to the divine origin of the rights of man at the creation Here our inquiries find a resting place and our reason finds a home

If a dispute about the rights of man had arisen at a distance of

The Parliament of *1688* might as well have passed an act to have authorized themselves to live forever as to make their authority to live forever All therefore that can be said of them is that they are a formality of words, of as much import as if those who used them had addressed a congratulation to themselves and in the oriental style of antiquity, had said, O Parliament, live forever!

The circumstances of the world are continually changing and the opinions of men change also, and as government is for the living and not for the dead, it is the living only that has any right in it That which may be thought right and found convenient in one age may be thought wrong and found inconvenient in another In such cases, who is to decide, the living or the dead?

As almost one hundred pages of Mr Burke's book are employed upon these clauses, it will consequently follow that if the clauses themselves, so far as they set up an *assumed, usurped* dominion over posterity forever are unauthoritative and in their nature null and void, that all his voluminous inferences and declamation drawn therefrom or founded thereon are null and void also and on this ground I rest the matter

[OF THE NATURAL AND CIVIL RIGHTS OF MAN]

I have now to follow Mr Burke through a pathless wilderness of rhapsodies and a sort of descant upon governments, in which he asserts whatever he pleases on the presumption of its being believed without offering either evidence or reasons for so doing

Before anything can be reasoned upon to a conclusion certain facts principles, or data to reason from must be established admitted or denied Mr Burke, with his usual outrage abuses the Declaration of the Rights of Man,* published by the National Assembly of France as the basis on which the Constitution of France is built This he calls '*paltry and blurred sheets of paper* about the rights of man

Does Mr Burke mean to deny that *man* has any rights? If he

* [*See pp 96 ff*]

does, then he must mean that there are no such things as rights anywhere and that he has none himself, for who is there in the world but man? But if Mr Burke means to admit that man has rights, the question then will be, what are those rights, and how came man by them originally?

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If a dispute about the rights of man had arisen at a distance of

a hundred years from the creation, it is to this source of authority they must have referred, and it is to the same source of authority that we must now refer

Though I mean not to touch upon any sectarian principle of religion, yet it may be worth observing that the genealogy of Christ is traced to Adam Why then not trace the rights of man to the creation of man? I will answer the question Because there have been upstart governments thrusting themselves between and presumptuously working to *unmake* man

If any generation of men ever possessed the right of dictating the mode by which the world should be governed forever, it was *the first generation that existed* and if that generation did it not no succeeding generation can show any authority for doing it nor can set any up

The illuminating and divine principle of the equal rights of man (for it has its origin from the Maker of man) relates not only to the living individuals but to generations of men succeeding each other Every generation is equal in rights to the generations which preceded it by the same rule that every individual *is born equal* in rights with his contemporary

Every history of the creation and every traditionary account whether from the lettered or unlettered world however they may vary in their opinion or belief of certain particulars all agree in establishing one point *the unity of man* by which I mean that men are all of *one degree*, and consequently that all men are born *equal and with equal natural rights* in the same manner as if posterity had been continued by *creation* instead of *generation* the latter being only the mode by which the former is carried forward and consequently every child born into the world must be considered as deriving its existence from God The world is as new to him as it was to the first man that existed and his natural right in it is of the same kind

The Mosaic account of the creation whether taken as divine authority or merely historical is fully up to this point *the unity or equality of man* The expressions admit of no controversy And God said let us make man in our own image In the image of God created he him, male and female created he them The distinction

of sexes is pointed out, but no other distinction is even implied If this be not divine authority, it is at least historical authority and shows that the equality of man, so far from being a modern doctrine, is the oldest upon record

It is also to be observed that all the religions known in the world are founded, so far as they relate to man, on the *unity of man*, as being all of one degree Whether in heaven or in hell, or in whatever state man may be supposed to exist hereafter, the good and the bad are the only distinctions Nay, even the laws of governments are obliged to slide into this principle, by making degrees to consist in crimes and not in persons

It is one of the greatest of all truths and of the highest advantage to cultivate By considering man in this light, and by instructing him to consider himself in this light it places him in a close connection with all his duties whether to his Creator or to the creation of which he is a part and it is only when he forgets his origin or, to use a more fashionable phrase, his *birth and family*, that he becomes dissolute

It is not among the least of [illegible]
ernmen [illegible]
thrown [illegible]
chasm [illegible]
gates through which he has to pass

I will quote Mr Burke s catalogue of barriers that he has set up between man and his Maker Putting himself in the character of a herald he says We fear God we look with *awe* to kings, with affection to parliaments with duty to magistrates, with reverence to priests and with respect to nobility Mr Burke has forgotten to put in chivalry He has also forgotten to put in Peter

The d [illegible]

[illegible] they will be despised and with regard to those to whom no power is delegated, but who assume it, the rational world can know nothing of them

Hitherto we have spoken only (and *that but in part*) of the natural rights of man We have now to consider the civil rights of man and to show how the one originates from the other Man did *not enter into society to become worse than he was before, nor to* have fewer rights than he had before, but to have those rights better secured His natural rights are the foundation of all his civil rights But in order to pursue this distinction with more precision it is necessary to make the different qualities of natural and civil rights

A few words will explain this Natural rights are those which appertain to man in right of his existence Of this kind are all the intellectual rights, or rights of the mind, and also all those rights of acting as an individual for his own comfort and happiness which are not injurious to the natural rights of others Civil rights are *those which appertain to man in right of his being a member of* society

Every civil right has for its foundation some natural right pre existing *in the individual, but to the enjoyment of which* his individual power is not in all cases sufficiently competent Of this kind are all those which relate to security and protection

From this short review it will be easy to distinguish between that class of natural rights which man retains after entering into society *and those which he throws into the common stock as a member of* society

The natural rights which he retains are all those in which the *power to execute is as perfect in the individual as the right* itself Among this class, as is before mentioned are all the intellectual rights, or rights of the mind consequently religion is one of those rights

The natural rights which are not retained are all those in which *though the right is perfect in the individual the power to execute* them is defective They answer not his purpose A man by natural right has a right to judge in his own cause and so far as the right of the mind is concerned he never surrenders it but what avails it him to judge if he has not power to redress? He therefore de posits his right *in the common stock of society and takes the arm* of society, of which he is a part, in preference and in addition to

his own Society *grants* him nothing Every man is proprietor in society and draws on the capital as a matter of right

From these premises, two or three certain conclusions will follow

First, that every civil right grows out of a natural right, or, in other words, is a natural right exchanged

Secondly, that civil power, properly considered as such, is made up of the aggregate of that class of the natural rights of man which becomes defective in the individual in point of power and answers not his purpose, but when collected to a focus becomes competent to the purpose of everyone

Thirdly, that the power produced from the aggregate of natural rights imperfect in power in the individual, cannot be applied to invade the natural rights which are retained in the individual and in which the power to execute is as perfect as the right itself

We have now, in a few words, traced man from a natural individual to a member of society and shown, or endeavored to show, the quality of the natural rights retained and those which are exchanged for civil rights Let us now apply those principles to governments

[Of the Nature of Government]

In casting our eyes over the world, it is extremely easy to distinguish the governments which have arisen out of society, or out of the social compact from those which have not, but to place this in a clearer light than what a single glance may afford, it will be proper to take a review of the several sources from which the governments have arisen and on which they have been founded

They may be all comprehended under three heads *First*, superstition *Secondly* power *Thirdly* the common interests of society and the common rights of man

The *first* was a government of priestcraft, the second, of conquerors and the third of reason

When a set of artful men pretended, through the medium of oracles to hold intercourse with the Deity, as familiarly as they

Hitherto we have spoken only (and that but in part) of the natural rights of man We have now to consider the civil rights of man *and to show how the one originates from the other* Man did not enter into society to become *worse* than he was before nor to have fewer rights than he had before, but to have those rights better secured *His natural rights are the foundation of all his civil rights* But in order to pursue this distinction with more precision it is necessary to make the different qualities of natural and civil rights

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We have now in a few words, traced man from a natural individual to a member of society and shown, or endeavored to show, the quality of the natural rights retained and those which are exchanged for civil rights Let us now apply those principles to governments

[OF THE NATURE OF GOVERNMENT]

In casting our eyes over the world it is extremely easy to distinguish the governments which have arisen out of society, or out of the social compact, from those which have not, but to place this in a clearer light than what a single glance may afford, it will be proper to take a review of the several sources from which the governments have arisen and on which they have been founded

They may be all comprehended under three heads *First*, superstition *Secondly* power *Thirdly*, the common interests of society and the common rights of man

The first was a government of priestcraft, the second, of conquerors and the third of reason

When a set of artful men pretended, through the medium of oracles, to hold intercourse with the Deity, as familiarly as they

now march up the backstairs in European courts, the world was completely under the government of superstition The oracles were consulted, and whatever they were made to say became the law, and this sort of government lasted as long as this sort of superstition lasted

After these a race of conquerors arose whose government, like that of William the Conqueror, was founded in power, and the sword *assumed the name of a scepter Governments thus estab*lished last as long as the power to support them lasts, but that they might avail themselves of every engine in their favor, they united fraud to force and set up an idol which they called "Divine Right," and which, in imitation of the Pope, who affects to be spiritual and temporal, and in contradiction to the founder of the Christian religion, twisted itself afterward into an idol of another shape, called 'Church and State" The key of Saint Peter and the key of the treasury became quartered on one another, and the wondering, cheated multitude worshiped the invention

When I contemplate the natural dignity of man, when I feel (for nature has not been kind enough to me to blunt my feelings) for the honor and happiness of its character, I become irritated at *the attempt to govern mankind by force and fraud, as if they* were all knaves and fools, and can scarcely avoid disgust at those who are thus imposed upon

We have now to review the governments which arise out of society, in contradistinction to those which arose out of superstition and conquest

It has been thought a considerable advance toward establishing the principles of freedom to say that government is a compact between those who govern and those who are governed, but this cannot be true, because it is putting the effect before the cause, or as a man must have existed before governments existed, there necessarily was a time when governments did not exist, and consequently there could originally exist no governors to form such a compact with

The fact therefore must be that the *individuals themselves*, each in his own personal and sovereign right *entered into a compact with each other* to produce a government, and this is the only

mode in which governments have a right to arise and the only principle on which they have a right to exist

To possess ourselves of a clear idea of what government is, or ought to be, we must trace it to its origin In doing this, we shall easily discover that governments must have arisen either *out* of the people or *over* the people Mr Burke has made no distinction

He investigates nothing to its source, and therefore he confounds everything, but he has signified his intention of undertaking at some future opportunity a comparison between the constitutions of England and France

As he thus renders it a subject of controversy by throwing the gauntlet, I take him upon his own ground It is in high challenges that high truths have the right of appearing, and I accept it with the more readiness because it affords me at the same time, an opportunity of pursuing the subject with respect to governments arising out of society

But it will be first necessary to define what is meant by a constitution It is not sufficient that we adopt the word, we must fix also a standard signification to it

A constitution is not a thing in name only, but in fact It has not an ideal, but a real existence and wherever it cannot be produced in a visible form there is none A constitution is a thing *antecedent* to a government and a government is only the creature of a constitution The constitution of a country is not the act of its government but of the people constituting a government

It is the body of elements to which you can refer and quote article by article, and which contains the principles on which the government shall be established the manner in which it shall be organized, the powers it shall have, the mode of elections, the duration of parliaments or by what other name such bodies may be called the powers which the executive part of the government shall have and in fine everything that relates to the complete organization of a civil government and the principles on which it shall act and by which *it shall be bound*

A constitution therefore, is to a government what the laws made afterward by that government are to a court of judicature The court of judicature does not make the laws neither can it alter

them, it only acts in conformity to the laws made, and the government is in like manner governed by the constitution

. . . .

[OF ARISTOCRACY]

The French constitution says, "there shall be no titles," and of consequence all that class of equivocal generation which in some countries is called "aristocracy" and in others "nobility" is done away, and the "peer" is exalted into "man"

Titles are but nicknames, and every nickname is a title The thing is perfectly harmless in itself, but it marks a sort of foppery in the human character which degrades it It renders man diminutive in things which are great, and the counterfeit of woman in things which are little It talks about its fine blue "riband' like a girl, and shows its new garter" like a child A certain writer, of some antiquity, says, "When I was a child, I thought as a child, but when I became a man, I put away childish things "[4]

It is, properly, from the elevated mind of France that the folly of titles has been abolished It has outgrown the baby clothes of "count" and "duke," and breeched itself in manhood France has not leveled, it has exalted It has put down the dwarf to set up the man The insignificance of a senseless word like "duke," "count," or "earl' has ceased to please Even those who possessed them have disowned the gibberish and as they outgrew the rickets have despised the rattle

The genuine mind of man, thirsting for its native home, society, contemns the gewgaws that separate him from it Titles are like circles drawn by the magician's wand to contract the sphere of man's felicity He lives immured within the Bastille of a word and surveys at a distance the envied life of man

Is it then any wonder that titles should fall in France? Is it not a greater wonder they should be kept up anywhere? What are they? What is their worth and "what is their amount?" When we think or speak of a "judge" or a "general" we associate with it the ideas of office and character, we think of gravity in the one

and bravery in the other but when we use a word merely as a title no ideas associate with it.

Through all the vocabulary of Adam, there is no such an animal as a duke or a count, neither can we connect any idea to the words Whether they mean strength or weakness, wisdom or folly, a child or a man, or a rider or a horse, is all equivocal What respect then can be paid to that which describes nothing and which means nothing? Imagination has given figure and character to centaurs, satyrs and down to all the fairy tribe, but titles baffle even the powers of fancy and are a chimerical nondescript

But this is not all If a whole country is disposed to hold them in contempt, all their value is gone and none will own them It is common opinion only that makes them anything or nothing or worse than nothing There is no occasion to take titles away, for they take themselves away when society concurs to ridicule them This species of imaginary consequence has visibly declined in every part of Europe and it hastens to its exit as the world of reason continues to rise

There was a time when the lowest class of what are called nobility was more thought of than the highest is now and when a man in armor riding through Christendom in search of adventure was more stared at than a modern duke The world has seen this folly fall and it has fallen by being laughed at, and the farce of titles will follow its fate

The patriots of France have discovered in good time that rank and dignity in society must take a new ground The old one has fallen through It must now take the substantial ground of character instead of the chimerical ground of titles and they have brought their titles to the altar and made of them a burnt offering to reason

If no mischief had annexed itself to the folly of titles, they would not have been worth a serious and formal destruction such as the National Assembly have decreed them and this makes it necessary to inquire further into the nature and character of aristocracy

That, then which is called aristocracy in some countries and nobility in others arose out of the governments founded upon

them, it only acts in conformity to the laws made, and the govern ment *is in like manner governed by the constitution*

. . .

[OF ARISTOCRACY]

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conquest It was originally a military order for the purpose of supporting military government (for such were all governments founded in conquest), and to keep up a succession of this order for the purpose for which it was established, all the younger branches of those families were disinherited and the law of *primogenitureship* set up

The nature and character of aristocracy shows itself to us in this law It is a law against every law of nature, and nature herself calls for its destruction Establish family justice, and aristocracy falls By the aristocratical law of primogenitureship, in a family of six children, five are exposed Aristocracy has never more than one child The rest are begotten to be devoured They are thrown to the cannibal for prey, and the natural parent prepares the unnatural repast

As everything which is out of nature in man affects, more or less, the interest of society, so does this All the children which the aristocracy disowns (which are all except the eldest) are, in general, cast like orphans on a parish, to be provided for by the public, but at a greater charge Unnecessary offices and places in governments and courts are created at the expense of the public to maintain them

With what kind of parental reflections can the father or mother *contemplate their younger offspring? By nature they are children* and by marriage they are heirs but by aristocracy they are bastards and orphans They are the flesh and blood of their parents in one line, and nothing akin to them in the other To restore, therefore, parents to their children and children to their parents—relations to each other and man to society—and to exterminate the monster aristocracy root and branch the French constitution has destroyed the law of primogenitureship Here then lies the monster, and Mr Burke if he pleases, may write its epitaph

Hitherto we have considered aristocracy chiefly in one point of view We have now to consider it in another But whether we view it before or behind or sideways, or anyway else domestically or publicly, it is still a monster

In France, aristocracy has one feature less in its countenance than what it has in some other countries It did not compose a

body of hereditary legislators It was not "a corporation of aristocracy, for such I have heard M de Lafayette[5] describe an English House of Peers Let us then examine the grounds upon which the French constitution has resolved against having such a House in France

Because, *in the first place*, as is already mentioned, aristocracy is kept up by family tyranny and injustice

Secondly, because there is an unusual unfitness in an aristocracy to be legislators for a nation Their ideas of distributive justice are corrupted at the very source They begin life by trampling on all their younger brothers and sisters and relations of every kind and are taught and educated so to do With what ideas of justice or honor can that man enter a house of legislation who absorbs in his own person the inheritance of a whole family of children or doles out to them some pitiful portion with the insolence of a gift?

Thirdly, because the idea of hereditary legislators is as inconsist
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… as a hereditary poet laureate

Fourthly, because a body of men holding themselves accountable to nobody ought not to be trusted by anybody

Fifthly, because it is continuing the uncivilized principles of the governments founded in conquest and the base idea of man having property in man and governing him by personal right

Sixthly, because aristocracy has a tendency to degenerate the human species By the universal economy of nature it is known and by the instance of the *Jews* it is proved, that the human species has a tendency *to degenerate* in any small number of persons when separated from the general stock of society and intermarrying constantly with each other

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… of characters the world has known have risen on the democratic floor Aristocracy has not been able to keep a proportionate pace with democracy

The artificial noble shrinks into a dwarf before the noble of

nature, and in the few instances of those (for there are some in all countries) in whom nature, as by a miracle, has survived in aris tocracy, *those men despise it*

[Of Religious Freedom]

The French constitution has abolished or renounced *toleration* and *intolerance* also, and has established *universal right of conscience*

Toleration is not the *opposite* of intoleration, but is the *counter feit* of it Both are despotisms The one assumes to itself the right of withholding liberty of conscience, and the other of granting it The one is the Pope armed with fire and faggot, and the other is the Pope selling or granting indulgences The former is church *and state, and the latter is church and traffic*

But toleration may be viewed in a much stronger light Man worships not himself but his Maker, and the liberty of conscience which he claims is not for the service of himself but of his God In this case, therefore, we must necessarily have the associated idea of two beings the *mortal* who renders the worship, and the *im mortal being* who is worshiped

Toleration therefore, places itself not between man and man, nor between church and church, nor between one denomination of religion and another but between God and man—between the being who worships and the *being* who is worshiped, and by the *same act of assumed authority by which it tolerates man to pay his* worship, it presumptuously and blasphemously sets up itself to tolerate the Almighty to receive it

Were a bill brought into Parliament entitled, An *act* to tolerate or grant liberty to the Almighty to receive the worship of a Jew or a Turk' or ' to prohibit the Almighty from receiving it," all men would startle and call it blasphemy There would be an up roar The presumption of toleration in religious matters would then present itself unmasked, but the presumption is not the less be cause the name of *man only appears to those laws, for the associ*

ated idea of the *worshiper* and the *worshiped* cannot be separated

Who, then, art thou, vain dust and ashes! by whatever name thou art called, whether a king, a bishop, a church or a state, a parliament or anything else, that obtrudest thine insignificance between the soul of man and his Maker? Mind thine own concerns If he believes not as thou believest, it is a proof that thou believest not as he believeth, and there is no earthly power can determine between you

With respect to what are called denominations of religion, if everyone is left to judge of his own religion, there is no such thing as a religion that is wrong but if they are to judge of each other's religion there is no such thing as a religion that is right, and there fore all the world is right or all the world is wrong

But with respect to religion itself, without regard to names and as directing itself from the universal family of mankind to the divine object of all adoration, *it is man bringing to his Maker the fruits of his heart*, and though these fruits may differ from each other like the fruits of the earth, the grateful tribute of everyone is accepted

A bishop of Durham, or a bishop of Winchester, or the arch bishop who heads the dukes will not refuse a tithe sheaf of wheat because it is not a cock of hay nor a cock of hay because it is not a sheaf of wheat, nor a pig because it is neither the one nor the other, but these same persons under the figure of an established church will not permit their Maker to receive the various tithes of man s devotion

One of the continual choruses of Mr Burke s book is "church id state " He does not mean some one particular church or some ie particular state but any church and state, and he uses the :rm as a general figure to hold forth the political doctrine of al ays uniting the church with the state in every country, and he ensures the National Assembly for not having done this in France et us bestow a few thoughts on this subject

All religions are in their nature mild and benign and united with principles of morality They could not have made proselytes at first by professing anything that was vicious, cruel, persecuting,

or immoral Like everything else, they had their beginning, and they proceeded by persuasion, exhortation, and example How, then, is it that they lose their native mildness and become morose and intolerant?

It proceeds from the connection which Mr Burke recommends By engendering the church with the state, a sort of mule animal, capable only of destroying, and not of breeding up, is produced called, "the church established by law" It is a stranger, even from its birth, to any parent mother on which it is begotten and whom in time it kicks out and destroys

The Inquisition in Spain does not proceed from the religion originally professed, but from this mule animal engendered between the church and the state The burnings in Smithfield [6] proceeded from the same heterogeneous production, and it was the regeneration of this strange animal in England afterward that renewed rancor and irreligion among the inhabitants and that drove the people called Quakers and Dissenters to America [7]

Persecution is not an original feature in *any* religion, but it is always the strongly marked feature of all law religions, or religions established by law Take away the law establishment, and every religion reassumes its original benignity In America, a Catholic priest is a good citizen, a good character, and a good neighbor, an Episcopal minister is of the same description, and this proceeds, independently of the men, from there being no law establishment in America

If, also, we view this matter in a temporal sense, we shall see the ill effects it has had on the prosperity of nations The union of church and state has impoverished Spain The revoking the Edict of Nantes [8] drove the silk manufacture from France into England, and church and state are now driving the cotton manufacture from England to America and France

Let then Mr Burke continue to preach his antipolitical doctrine of church and state It will do some good The National Assembly will not follow his advice but will benefit by his folly It was by observing the ill effects of it in England that America has been warned against it, and it is by experiencing them in France that the National Assembly have abolished it and, like America, have

established *universal right of conscience and universal right of citizenship* [b]

. . . .

The conspiracy being thus dispersed, one of the first works of the National Assembly, instead of vindictive proclamations, as has been the case with other governments, published a Declaration of the Rights of Man, as the basis on which the new constitution was to be built, and which is here subjoined

[b] When in any country we see extraordinary circumstances taking place, they naturally lead any man who has a talent for observation and investigation to inquire into the causes The manufactures of Manchester, Birmingham, and Sheffield are the principal manufactures in England. From whence did this arise? A little observation will explain the case

The principal and the generality of the inhabitants of those places are not of what is called in England "the church established by law", and they or their fathers (for it is within but a few years) withdrew from the persecution of the chartered towns, where test laws more particularly operate, and established a sort of asylum for themselves in those places It was the only asylum that then offered, for the rest of Europe was worse

But the case is now changing France and America bid all comers welcome, and initiate them into all the rights of citizenship Policy and interest, therefore, will, but perhaps too late dictate in England what reason and justice could not. Those manufactures are withdrawing and are arising in other places. There is now (1791) erecting at Passy, three miles from Paris, a large cotton mill, and several are already erected in America. Soon after the rejecting the bill for repealing the test law one of the richest manufacturers in England said in my hearing "England Sir, is not a country for a Dissenter to live in— we must go to France"

These are truths and it is doing justice to both parties to tell them It is chiefly the Dissenters who have carried English manufactures to the height they are now at, and the same men have it in their power to carry them away, and though those manufactures would afterward continue to be made in those places, the foreign market would be lost There are frequently appearing in the [illegible]

. . . .

[illegible] of England, of all denominations, which is at least a hundred times the most numerous, may begin to feel the necessity of a constitution, and then all those matters will come regularly before them.

DECLARATION OF THE RIGHTS OF MAN AND OF CITIZENS

BY THE NATIONAL ASSEMBLY OF FRANCE

The representatives of the people of France, formed into a National Assembly, considering that ignorance, neglect, or contempt of human rights are the sole causes of public misfortunes and corruptions of government, have resolved to set forth in a solemn declaration these natural, imprescriptible, and unalienable rights, that, this declaration being constantly present to the minds of the members of the body social, they may be ever kept attentive to their rights and their duties, that the acts of the legislative and executive powers of government, being capable of being every moment compared with the end of political institutions, may be more respected, and also that the future claims of the citizens, being directed by simple and incontestible principles, may always tend to the maintenance of the constitution and the general happiness

For these reasons the National Assembly does recognize and declare, in the presence of the Supreme Being, and with the hope of His blessing and favor, the following *sacred* rights of men and of citizens

I *Men are born, and always continue, free and equal in respect of their rights Civil distinctions, therefore, can be founded only on public utility*

II *The end of all political associations is the preservation of the natural and imprescriptible rights of man, and these rights are liberty, property security, and resistance of oppression*

III *The nation is essentially the source of all sovereignty, nor can any individual or any body of men be entitled to any authority which is not expressly derived from it*

IV Political liberty consists in the power of doing whatever does not injure another The exercise of the natural rights of every man has no other limits than those which are necessary to secure to every *other* man the free exercise of the same rights and these limits are determinable only by the law

V The law ought to prohibit only actions hurtful to society

What is not prohibited by the law should not be hindered, nor should anyone be compelled to that which the law does not require

VI The law is an expression of the will of the community All citizens have a right to concur, either personally or by their representatives in its formation It should be the same to all, whether it protects or punishes, and *all being equal in its sight are equally eligible to all honors, places, and employments, according to their different abilities without any other distinction than that created by their virtues and talents*

VII No man should be accused, arrested or held in confinement, except in cases determined by the law and according to the forms which it has prescribed All who promote solicit, execute or cause to be executed arbitrary orders ought to be punished and every citizen called upon or apprehended by virtue of the law ought immediately to obey and renders himself culpable by resistance

VIII The law ought to impose no other penalties but such as are absolutely and evidently necessary and no one ought to be punished but in virtue of a law promulgated before the offense and legally applied

IX Every man being presumed innocent till he has been convicted whenever his detention becomes indispensable all rigor to him—more than is necessary to secure his person—ought to be provided against by the law

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XI The unrestrained communication of thoughts and opinions being one of the most precious rights of man every citizen may speak write and publish freely provided he is responsible for the abuse of this liberty in cases determined by the law

XII A public force being necessary to give security to the rights of men and of citizens that force is instituted for the benefit of the community and not for the particular benefit of the persons w

y according to their abilities

XIV Every citizen has a right either by himself or his representative to a free voice in determining the necessity of public

contributions, the appropriation of them, and their amount mode of assessment, and duration

XV Every community has a right to demand of all its agents an account of their conduct

XVI Every community in which a separation of powers and a security of rights is not provided for wants a constitution

XVII The rights to property being inviolable and sacred no one ought to be deprived of it, except in cases of evident public necessity, legally ascertained, and on condition of a previous just indemnity

OBSERVATIONS ON THE DECLARATION OF RIGHTS

The three first articles comprehend in general terms the whole of a Declaration of Rights, all the succeeding articles either originate from them or follow as elucidations The fourth, fifth and sixth define more particularly what is only generally expressed in the first, second, and third

The seventh, eighth, ninth, tenth, and eleventh articles are declaratory of *principles* upon which laws shall be constructed conformable to *rights* already declared But it is questioned by some very good people in France, as well as in other countries whether the tenth article sufficiently guarantees the right it is intended to accord with besides which it takes off from the divine dignity of religion and weakens its operative force upon the mind to make it a subject of human laws It then presents itself to man like light intercepted by a cloudy medium, in which the source of it is obscured from his sight, and he sees nothing to reverence in the dusky ray [c]

[c] There is a single idea which if it strikes rightly upon the mind either in a legal or a religious sense will prevent any man or any body of men or any government from going wrong on the subject of religion which is that before any human institutions of government were known in the world there existed if I may so express it a compact between God and man from the beginning of time and that as the relation and condition which man in his *individual person* stands in toward his Maker cannot be changed or any ways altered by any human laws or human authority that religious devotion which is a part of this

The remaining articles, beginning with the twelfth, are substantially contained in the principles of the preceding articles but in the particular situation in which France then was, having to undo what was wrong as well as to set up what was right, it was proper to be more particular than what in another condition of things would be necessary

While the Declaration of Rights was before the National Assembly, some of its members remarked that, if a Declaration of Rights was published, it should be accompanied by a Declaration of *Duties* The observation discovered a mind that reflected, and it only erred by not reflecting far enough A Declaration of Rights is, by reciprocity, a Declaration of Duties also Whatever is my right as a man is also the right of another and it becomes my duty to guarantee as well as to possess

The three first articles are the basis of liberty, as well individual as national nor can any country be called free whose government *does not* take its beginning from the principles they contain and continue to preserve them pure and the whole of the Declaration of *Rights is* of more value to the world and will do more good than all the laws and statutes that have yet been promulgated

In the declaratory exordium which prefaces the Declaration of Rights, we see the solemn and majestic spectacle of a nation opening its commission under the auspices of its Creator, *to establish a government* a scene so new and so transcendently unequaled by anything in the European world that the name of a revolution is diminutive of its character, and it rises into a regeneration of man

What are the present governments of Europe but a scene of iniquity and *oppression? What* is that of England? Do not its own inhabitants say it is a market where every man has his price,

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and where corruption is common traffic, at the expense of a de luded people? No wonder, then, that the French Revolution is traduced

Had it confined itself merely to the destruction of flagrant des potism, perhaps Mr Burke and some others had been silent Their cry now is, *"It is gone too far"—that is, it has gone too far for* them It stares corruption in the face, and the venal tribe are all alarmed Their fear discovers itself in their outrage, and they are but *publishing the groans of a wounded vice*

But from such opposition the French Revolution, instead of suffering, receives a homage The more it is struck, the more *sparks it will emit, and the fear is it will not be struck enough* It has nothing to dread from attacks, truth has given it an establishment, and time will record it with a name as lasting as *his own*

Having now traced the progress of the French Revolution through most of its principal stages, from its commencement to the *taking of the Bastille and its establishment by the Declaration* of Rights, I will close the subject with the energetic apostrophe of M de Lafayette 'May this great monument raised to Liberty' *serve as a lesson to the oppressor and an example to the op* pressed!" [d]

[Of Hereditary Government] [e]

Notwithstanding *the nonsense—for it deserves* no better name —that Mr Burke has asserted about hereditary rights and heredi tary succession, and that a nation has not a right to form a government for itself, it happened to fall in his way to give some account of what Government is "Government," says he, "is a contrivance of human wisdom '

[d] See page [182] of this work —N B Since the taking of the Bastille the oc currences have been published but the matters recorded in this narrative are prior to that period, and some of them as may be easily seen, can be but very little known

[e] [From "Miscellaneous Chapter," Part I]

Admitting that government is a contrivance of human *wisdom*, it must necessarily follow that hereditary succession and hereditary rights (as they are called) can make no part of it, because it is impossible to make wisdom hereditary, and on the other hand, *that* cannot be a wise contrivance which in its operation may commit the government of a nation to the wisdom of an idiot The ground which Mr Burke now takes is fatal to every part of his cause

The argument changes from hereditary rights to hereditary wisdom, and the question is, Who is the wisest man? He must now show that everyone in the line of hereditary succession was a Solomon, or his title is not good to be a king What a stroke has Mr Burke now made! To use a sailor s phrase, he has "swabbed the deck' and scarcely left a name legible in the list of kings, and he has mowed down and thinned the House of Peers with a scythe as formidable as death and time But Mr Burke appears to have been aware of this retort, and he has taken care to guard against it by making government to be not only a *contrivance* of human wisdom but a *monopoly* of wisdom He puts the nation as fools on one side and places his government of wisdom, all wise men of Gotham, on the other side and he then proclaims and says that 'men have a *right* that their *wants* should be provided for by this wisdom'

Having thus made proclamation, he next proceeds to explain to them what their *wants* are and also what their *rights* are

In this he has succeeded dexterously, for he makes their wants to be a *want* of wisdom, but as this is but cold comfort, he then informs them that they have a *right* (not to any of the wisdom) but to be governed by it and in order to impress them with a solemn reverence for this monopoly government of wisdom and of its vast capacity for all purposes, possible or impossible, right or wrong he proceeds with astrological, mysterious importance to tell them its powers in these words

The r ghts of m

tracting, multiplying, and dividing, morally and not metaphysically or mathematically, true moral demonstrations

As the wondering audience whom Mr Burke supposes himself talking to may not understand all this learned jargon, I will undertake to be its interpreter The meaning then good people, of all this is *that government is governed by no principle whatever, that it can make evil good, or good evil, just as it pleases In short, that government is arbitrary power*

But there are some things which Mr Burke has forgotten First, he has not shown where the wisdom originally came from and secondly, he has not shown by what authority it first began to act In the manner he introduces the matter, it is either government stealing wisdom or wisdom stealing government It is without an origin, and its powers without authority In short, it is usurpation

But, to arrange this matter in a clearer view than what general expressions can convey, it will be necessary to state the distinct heads under which (what is called) a hereditary crown or, more properly speaking, a hereditary succession to the government of a nation can be considered,[f] which are

First, the right of a particular family to establish itself
Secondly, the right of a nation to establish a particular family

With respect to the *first* of these heads, that of a family establishing itself with hereditary powers on its own authority and independent of the consent of a nation, all men will concur in calling it despotism, and it would be trespassing on their understanding to attempt to prove it

But the *second* head, that of a nation establishing a particular family with *hereditary powers*, does not present itself as despotism on the first reflection but if men will permit a second reflection to take place and carry that reflection forward but one remove out of their own persons to that of their offspring they will then see that hereditary succession becomes in its consequences the same despotism to others which they reprobated for themselves It op

f [See p 161]

rates to preclude the consent of the succeeding generations and he preclusion of consent is despotism

When the person who at any time shall be in possession of a government or those who stand in succession to him shall say to a nation I hold this power in contempt of you it signifies not on what authority he pretends to say it It is no relief but an aggravation to a person in slavery to reflect that he was sold by his parent and as that which heightens the criminality of an act cannot be produced to prove the legality of it hereditary succession cannot be established as a legal thing

In order to arrive to a more perfect decision on this head it will be proper to consider the generation which undertakes to establish a family with *hereditary powers* apart and separate from the generations which are to follow and also to consider the character in which the *first* generation acts with respect to succeeding generations

The generation which first selects a person and puts him at the head of its government either with the title of king or any other distinction acts its *own choice* be it wise or foolish as a free agent for *itself* The person so set up is not hereditary, but selected and appointed and the generation who sets him up does not live under a hereditary government but under a government of its own choice and establishment Were the generation who sets him up and the person so set up to live forever it never could become hereditary succession and of consequence hereditary succession can only follow on the death of the first parties

As therefore hereditary succession is out of the question with respect to the *first* generation we have now to consider the character in which *that* generation acts with respect to the commencing generation and to all succeeding ones

It assumes a character to which it has neither right nor title It changes itself from a *legislator* to a *testator* and affects to make its will, which is to have operation after the demise of the makers to bequeath the government and it not only attempts to bequeath but to establish on the succeeding generation a new and different form of government under which itself lived

Itself as is already observed lived not under a hereditary gov

ernment but under a government of its own choice and establishment, and it now attempts, by virtue of a will and testament (which it has not authority to make), to take from the commencing generation and all future ones the rights and free agency by which itself acted

But, exclusive of the right which any generation has to act collectively as a testator, the objects to which it applies itself in this case are not within the compass of any law or of any will or testament

The rights of men in society are neither devisable nor transferable nor annihilable, but are descendible only, and it is not in the power of any generation to intercept finally and cut off the descent If the present generation, or any other, are disposed to be slaves, *it does not lessen the right of the succeeding generation to be free,* wrongs cannot have a legal descent When Mr Burke attempts to maintain that the *English nation did at the Revolution of 1688 most solemnly renounce and abdicate their right for themselves and for all their posterity forever,* he speaks a language that merits not reply and which can only excite contempt for his prostitute principles or pity for his ignorance

In whatever light hereditary succession, as growing out of the will and testament of some former generation, presents itself, it is an absurdity A cannot make a will to take from B the property of B and give it to C, yet this is the manner in which (what is called) hereditary succession by law operates

A certain former generation made a will to take away the rights of the commencing generation and all future ones, and to convey those rights to a third person, who afterward comes forward and tells them, in Mr Burke's language, that they have *no rights,* that *their rights are already bequeathed to him, and that he will govern* in *contempt* of them From such principles and such ignorance, good Lord, deliver the world!

CONCLUSION

Reason and ignorance, the opposites of each other, influence the great bulk of mankind If either of these can be rendered sufficiently extensive in a country, the machinery of government goes easily on Reason shows itself, and ignorance submits to whatever is dictated to it

The two modes of government which prevail in the world are, first, government by election and representation, secondly, government by hereditary succession The former is generally known by the name of republic, the latter by that of monarchy and aristocracy

Those two distinct and opposite forms erect themselves on the two distinct and opposite bases of reason and ignorance As the exercise of government requires talents and abilities, and as talents and abilities cannot have hereditary descent, it is evident that hereditary succession requires a belief from man to which his reason cannot subscribe and which can only be established upon his ignorance, and the more ignorant any country is the better it is fitted for this species of government

On the contrary, government in a well constituted republic requires no belief from man beyond what his reason can give He sees the rationale of the whole system its origin and its operation and as it is best supported when best understood the human faculties act with boldness and acquire under this form of government, a gigantic manliness

As therefore each of those forms acts on a different base—the one moving freely by the aid of reason the other by ignorance—we have next to consider what it is that gives motion to that species of government which is called mixed government, or as it is sometimes ludicrously styled a government of *this, that* and *t other*

The moving power of this species of government is of necessity, corruption However imperfect election and representation may be in mixed governments, they still give exercise to a greater portion of reason than is convenient to the hereditary part and therefore it becomes necessary to buy the reason up A mixed government is

an imperfect everything, cementing and soldering the discordant parts together by *corruption to act as a whole* Mr Burke appears highly disgusted that France, since she had resolved on a revolution, did not adopt what he calls "a British constitution", and the regretful manner in which he expresses himself on this occasion implies a suspicion that the British constitution needed something to keep its defects in countenance

In mixed governments, there is no responsibility, the parts cover each other till responsibility is lost, and the corruption which moves the machine contrives at the same time its own escape When it is laid down as a maxim that *a king can do no wrong*, it places him in a state of similar security with that of idiots and persons insane, and responsibility is out of the question with respect to himself It then descends upon the minister, who shelters himself under a majority in Parliament, which, by places, pensions, and corruption, he can always command, and that majority justifies itself by the same authority with which it protects the minister In this rotary motion, responsibility is thrown off from the parts and from the whole

When there is a part in a government which can do no wrong, it implies that it does nothing and is only the machine of another power, by whose advice and direction it acts What is supposed to be the king in mixed governments is the cabinet, and as the cabinet is always a part of the Parliament and the members justifying *in one character what they advise and act in another*, a mixed government becomes a continual enigma, entailing upon a country, by the quantity of corruption necessary to solder the parts, the expense of supporting all the forms of government at once and finally resolving itself into a government by committee, in which the advisers, the actors, the approvers, the justifiers, the persons responsible, and the persons not responsible are the same persons

By this pantomimical contrivance and change of scene and character, *the parts help each other out in matters which neither* of them singly would assume to act When money is to be obtained, the mass of variety apparently dissolves, and a profusion of parliamentary praises passes between the parts Each admires with

astonishment the wisdom, the liberality, the disinterestedness of the other, and all of them breathe a pitying sigh at the burdens of the nation

But in a well-constituted republic, nothing of this soldering, praising and pitying can take place, the representation being equal throughout the country and complete in itself, however it may be arranged into legislative and executive, they have all one and the same natural source The parts are not foreigners to each other like democracy, aristocracy, and monarchy As there are no discordant distinctions, there is nothing to corrupt by compromise nor confound by contrivance

Public measures appeal of themselves to the understanding of the nation, and resting on their own merits, disown any flattering application to vanity The continual whine of lamenting the burden of taxes, however successfully it may be practiced in mixed governments is inconsistent with the sense and spirit of a republic If taxes are necessary, they are of course advantageous, but if they require an apology, the apology itself implies an impeachment Why then is man thus imposed upon, or why does he impose upon himself?

When men are spoken of as kings and subjects, or when government is mentioned under the distinct or combined heads of monarchy, aristocracy, and democracy what is it that reasoning man is to understand by the terms? If there really existed in the world two or more distinct and separate elements of human power, we should then see the several origins to which those terms would descriptively apply, but as there is but one species of man, there can be but one element of human power, and that element is man himself Monarchy, aristocracy, and democracy are but creatures of imagination, and a thousand such may be contrived, as well as three

From the revolutions of America and France and the symptoms that have appeared in other countries it is evident that the opinion of the world is changed with respect to systems of government, and that revolutions are not within the compass of political calculations The progress of time and circumstances, which men

assign to the accomplishment of great changes, is too mechanical to measure the force of the mind and the rapidity of reflection by which revolutions are generated All the old governments have received a shock from those that already appear and which were once more improbable, and are a greater subject of wonder than a general revolution in Europe would be now

When we survey the wretched condition of man under the monarchical and hereditary systems of government, dragged from his home by one power or driven by another, and impoverished by taxes more than by enemies, it becomes evident that those systems are bad, and that a general revolution in the principle and construction of governments is necessary

What is government more than the management of the affairs of a nation? It is not and from its nature cannot be the property of any particular man or family, but of the whole community, at whose expense it is supported, and though by force or contrivance it has been usurped into an inheritance, the usurpation cannot alter the right of things Sovereignty, as a matter of right, appertains to the nation only, and not to any individual, and a nation has at all times an inherent indefeasible right to abolish any form of government it finds inconvenient and establish such as accords with its interest, disposition, and happiness The romantic and barbarous distinction of men into kings and subjects, though it may suit the condition of courtiers, cannot that of citizens, and is exploded by the principle upon which governments are now founded Every citizen is a member of the sovereignty and as such can acknowledge no personal subjection, and his obedience can be only to the laws

When men think of what government is, they must necessarily suppose it to possess a knowledge of all the objects and matters upon which its authority is to be exercised In this view of government, the republican system as established by America and France, operates to embrace the whole of a nation, and the knowledge necessary to the interest of all the parts is to be found in the center which the parts by representation form But the old governments are on a construction that excludes knowledge as well as happiness, government by monks, who know nothing of

the world beyond the walls of a convent, is as consistent as government by kings

What were formerly called revolutions were little more than a change of persons or an alteration of local circumstances They rose and fell like things of course and had nothing in their existence or their fate that could influence beyond the spot that produced them But what we now see in the world, from the revolutions of America and France, is a renovation of the natural order of things, a system of principles as universal as truth and the existence of man, and combining moral with political happiness and national prosperity

I Men are born and always continue free and equal in respect to their rights Civil distinctions, therefore, can be founded only on public utility

II The end of all political associations is the preservation of the natural and imprescriptible rights of man, and these rights are liberty [illegible]

I [illegible]

can [illegible]

which is not expressly derived from it

In these principles there is nothing to throw a nation into confusion by inflaming ambition They are calculated to call forth wisdom and abilities and to exercise them for the public good and not for the emolument or aggrandizement of particular descriptions of men or families Monarchial sovereignty, the enemy of mankind and the source of misery, is abolished and sovereignty itself is restored to its natural and original place, the nation Were this the case throughout Europe, the cause of wars would be taken away

It is attributed to Henry IV of France,[10] a man of an enlarged and benevolent heart, that he proposed, about the year 1610, a plan of abolishing war in Europe The plan consisted in constituting a European congress or, as the French authors style it, a pacific republic, by appointing delegates from the several nations, who were to act as a court of arbitration in any disputes that might arise between nation and nation Had such a plan been adopted at the time it was proposed, the taxes of England and France, as two of

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not the enemy of man, but through the medium of a false system of government Instead, therefore, of exclaiming against the ambition of kings the exclamation should be directed against the principle of such governments, and instead of seeking to reform the individual, the wisdom of a nation should apply itself to reform the system

Whether the forms and maxims of governments which are still in practice were adapted to the condition of the world at the period they were established is not in this case the question The older they are, the less correspondence can they have with the present state of things Time and change of circumstances and opinions have the same progressive effect in rendering modes of government obsolete as they have upon customs and manners Agriculture, commerce, manufactures and the tranquil arts, by which the prosperity of nations is best promoted, require a different system of government and a different species of knowledge to direct its operations than what might have been required in the former condition of the world

As it is not difficult to perceive from the enlightened state of mankind, that hereditary governments are verging to their decline and that revolutions on the broad basis of national sovereignty and government by representation are making their way in Europe, it would be an act of wisdom to anticipate their approach and produce revolutions by reason and accommodation, rather than commit them to the issue of convulsions

From what we now see, nothing of reform on the political world ought to be held improbable It is an age of revolutions, in which everything may be looked for The intrigue of courts, by which the system of war is kept up may provoke a confederation of nations to abolish it, and a European congress to patronize the progress of free government and promote the civilization of nations with each other is an event nearer in probability than once were the revolutions and alliance of France and America

the parties, would have been at least ten millions sterling annually to each nation less than they were at the commencement of the French Revolution

To conceive a cause why such a plan has not been adopted (and that, instead of a congress for the purpose of *preventing* war, it has been called only to *terminate* a war after fruitless expense of several years), it will be necessary to consider the interest of governments as a distinct interest to that of nations

Whatever is the cause of taxes to a nation becomes also the means of revenue to a government Every war terminates with an addition of taxes, and consequently with an addition of revenue, and in any event of war, in the manner they are now commenced and concluded, the power and interest of governments are increased War, therefore, from its productiveness, as it easily furnishes the pretense of necessity for taxes and appointments to places and offices, becomes a principal part of the system of old governments and to establish any mode to abolish war, however advantageous it might be to nations, would be to take from such government the most lucrative of its branches The frivolous matters upon which war is made show the disposition and avidity of governments to uphold the system of war and betray the motives upon which they act

Why are not republics plunged into war but because the nature of their government does not admit of an interest distinct from that of the nation? Even Holland, though an ill constructed republic, and with a commerce extending over the world, existed nearly a century without war and the instant the form of government was changed in France the republican principles of peace and domestic prosperity and economy arose with the new government, and the same consequence would follow the same causes in other nations

As war is the system of government on the old construction, the animosity which nations reciprocally entertain is nothing more than what the policy of their governments excites to keep up the spirit of the system Each government accuses the other of perfidy, intrigue, and ambition as a means of heating the imagination of their respective nations and incensing them to hostilities Man is

The scene which that country presents to the eye of a spectator has something in it which generates and encourages great ideas Nature appears to him in magnitude The mighty objects he beholds act upon his mind by enlarging it, and he partakes of the greatness he contemplates Its first settlers were emigrants from different European nations and of diversified professions of religion retiring from the governmental persecutions of the Old World and meeting in the New, not as enemies but as brothers The wants which necessarily accompany the cultivation of a wilderness produced among them a state of society, which countries long harassed by the quarrels and intrigues of governments had neglected to cherish In such a situation man becomes what he ought He sees his species, not with the inhuman idea of a natural enemy, but as kindred and the example shows to the artificial world that man must go back to nature for information

From the rapid progress which America makes in every species of improvement, it is rational to conclude that if the governments of Asia, Africa, and Europe had begun on a principle similar to that of America, or had not been very early corrupted therefrom, that those countries must by this time have been in a far superior condition to what they are Age after age has passed away for no other purpose than to behold their wretchedness Could we suppose a spectator who knew nothing of the world and who was put into it merely to make his observations, he would take a great part of the Old World to be new, just struggling with the difficulties and hardships of an infant settlement He could not suppose that the hordes of miserable poor, with which old countries abound, could be any other than those who had not yet had time to provide for themselves Little would he think they were the consequence of what in such countries is called government

If, from the more wretched parts of the Old World, we look at those which are in an advanced stage of improvement, we still find the greedy hand of government thrusting itself into every corner and crevice of industry and grasping the spoil of the multitude Invention is continually exercised to furnish new pretenses for revenue and taxation It watches prosperity as its prey and permits none to escape without tribute

RIGHTS OF MAN

PART TWO

INTRODUCTION

WHAT ARCHIMEDES said of the mechanical powers may be applied to reason and liberty "Had we," said he, "a place to stand upon, we might raise the world The Revolution of America presented in politics what was only theory in mechanics So deeply rooted were all the governments of the Old World, and so effectually had the tyranny and the antiquity of habit established itself over the mind that no beginning could be made in Asia, Africa, or Europe to reform the political condition of man Freedom had been hunted round the globe, reason was considered as rebellion, and the slavery of fear had made men afraid to think

But such is the irresistible nature of truth that all it asks and all it wants is the liberty of appearing The sun needs no inscription to distinguish him from darkness, and no sooner did the American governments display themselves to the world than despotism felt a shock and man began to contemplate redress

The independence of America considered merely as a separation from England, would have been a matter but of little importance, had it not been accompanied by a revolution in the principles and practice of governments She made a stand, not for herself only, but for the world, and looked beyond the advantages herself could receive Even the Hessian though hired to fight against her, may live to bless his defeat and England, condemning the viciousness of its government rejoice in its miscarriage

As America was the only spot in the political world where the principles of universal reformation could begin, so also was it the best in the natural world An assemblage of circumstances conspired, not only to give birth, but to add gigantic maturity to its principles

human affairs has its ebb and flow in directions contrary to each other, so also is it in this Government founded on a *moral theory, on a system of universal peace, on the indefeasible, hereditary rights of man*, is now revolving from West to East by a stronger impulse than the government of the sword revolved from East to West It interests not particular individuals but nations in its progress and promises a new era to the human race

The danger to which the success of revolutions is most exposed is that of attempting them before the principles on which they proceed, and the advantages to result from them, are sufficiently seen and understood Almost everything appertaining to the circumstances of a nation has been absorbed and confounded under the general and mysterious word government Though it avoids taking to its account the errors it commits, and the mischiefs it occasions, it fails not to arrogate to itself whatever has the appearance of prosperity It robs industry of its honors by pedantically making itself the cause of its effects, and purloins from the general character of man the merits that appertain to him as a social being

It may therefore be of use in this day of revolutions to discriminate between those things which are the effect of government and those which are not This will best be done by taking a review of society and civilization and the consequences resulting therefrom as things distinct from what are called governments By beginning with this investigation, we shall be able to assign effects to their proper cause and analyze the mass of common errors

OF SOCIETY AND CIVILIZATION*

Great part of that order which reigns among mankind is not the effect of government It had its origin in the principles of society and the natural constitution of man It existed prior to government, and would exist if the formality of government was abolished The mutual dependence and reciprocal interest which man has upon man and all parts of a civilized community upon

* [Chapter I Part II]

As revolutions have begun (and the probability is always greater against a thing beginning than of proceeding after it has begun), it is natural to expect that other revolutions will follow The amazing and still *increasing expenses with which old governments* are conducted, the numerous wars they engage in or provoke, the embarrassment they throw in the way of universal civilization and commerce, and the oppression and usurpation they practice at home, have wearied out the patience and exhausted the property of the world In such a *situation, and with the examples already* existing, revolutions are to be looked for They are become subjects of universal conversation and may be considered as the *order of the day*

If systems of government can be introduced less expensive and more productive of general happiness than those which have existed, all attempts to oppose their progress will in the end be fruitless Reason, like time, will make its own way, and prejudice will fall in a combat with interest If universal peace, civilization, and commerce are ever to be the happy lot of man, it cannot be accomplished but by a revolution in the system of governments All the monarchical governments are military War is their trade, plunder and revenue their objects While such governments continue, peace has not the absolute security of a day

What is the history of all monarchical governments but a disgustful picture of human wretchedness and the accidental respite of a few years' repose? Wearied with war and tired with human butchery, they sat down to rest and called it peace This certainly *is not the condition that heaven intended for man* and if *this be monarchy,* well might monarchy be reckoned among the sins of the Jews

The revolutions which formerly took place in the world had nothing in them that interested the bulk of mankind They extended only to a change of persons and measures but not of principles, *and rose or fell among the common transactions* of the moment What we now behold may not improperly be called a "counterrevolution"

Conquest and tyranny, at some early period, dispossessed man of his rights, and he is now recovering them And as the tide of all

human affairs has its ebb and flow in directions contrary to each other so also is it in this Government founded on a *moral theory on a system of universal peace, on the indefeasible, hereditary rights of man* is now revolving from West to East by a stronger impulse than the government of the sword revolved from East to West It interests not particular individuals but nations in its progress and promises a new era to the human race

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* [Chapter I Part II]

each other create that great chain of connection which holds it together The landholder, the farmer, the manufacturer, the merchant, the tradesman, and every occupation, prospers by the aid which each receives from the other and from the whole Common interest regulates their concerns and forms their laws, and the laws which common usage ordains have a greater influence than the laws of government In fine, society performs for itself almost everything which is ascribed to government

To understand the nature and quantity of government proper for man, it is necessary to attend to his character As nature created him for social life, she fitted him for the station she intended In all cases she made his natural wants greater than his individual powers No one man is capable, without the aid of society, of supplying his own wants and those wants acting upon every individual impel the whole of them into society, as naturally as gravitation acts to a center

But she has gone further She has not only forced man into society by a diversity of wants, which the reciprocal aid of each other can supply, but she has implanted in him a system of social affections which though not necessary to his existence, are essential to his happiness There is no period in life when this love for society ceases to act It begins and ends with our being

If we examine with attention into the composition and constitution of man the diversity of his wants and the diversity of talents in different men for reciprocally accommodating the wants of each other, his propensity to society and consequently to preserve the advantages resulting from it we shall easily discover that a great part of what is called government is mere imposition

Government is no further necessary than to supply the few cases to which society and civilization are not conveniently competent, and instances are not wanting to show that everything which government can usefully add thereto has been performed by the common consent of society without government

For upward of two years from the commencement of the American war, and to a longer period in several of the American states there were no established forms of government The old governments had been abolished, and the country was too much

occupied in defense to employ its attention in establishing new governments, yet during this interval order and harmony were preserved as inviolate as in any country in Europe

There is a natural aptness in man, and more so in society, because it embraces a greater variety of abilities and resources to accommodate itself to whatever situation it is in The instant formal government is abolished, society begins to act A general association takes place, and common interest produces common security

So far is it from being true, as has been pretended, that the abolition of any formal government is the dissolution of society, that it acts by a contrary impulse and brings the latter the closer together All that part of its organization which it had committed to its government devolves again upon itself and acts through its medium

When men, as well from natural instinct as from reciprocal benefits have habituated themselves to social and civilized life, there is always enough of its principles in practice to carry them through any changes they may find necessary or convenient to make in their government In short man is so naturally a creature of society that it is almost impossible to put him out of it

Formal government makes but a small part of civilized life, and when even the best that human wisdom can devise is established, it is a thing more in name and idea than in fact It is to the great and fundamental principles of society and civilization—to the common usage universally consented to and mutually and reciprocally maintained—to the unceasing circulation of interest, which passing through its million channels, invigorates the whole mass of civilized man—it is to these things, infinitely more than to anything which even the best instituted government can perform, that the safety and prosperity of the individual and of the whole depends

The more perfect civilization is the less occasion has it for government because the more does it regulate its own affairs and govern *itself* but so contrary is the practice of old governments to the reason of the case that the expenses of them increase in the proportion they ought to diminish It is but few general

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means, never fail to appear in their effects As a great mass of the community are thrown thereby into poverty and discontent, they are constantly on the brink of commotion and, deprived as they unfortunately are of the means of information, are easily heated to outrage Whatever the apparent cause of any riots may be, the real one is always want of happiness It shows that something is wrong in the system of government that injures the felicity by which society is to be preserved

But as fact is superior to reasoning, the instance of America presents itself to confirm these observations If there is a country in the world where concord, according to common calculation, would be least expected, it is America Made up as it is of people from different nations,[b] accustomed to different forms and habits of government, speaking different languages, and more different in their modes of worship, it would appear that the union of such a people was impracticable, but by the simple operation of constructing government on the principles of society and the rights of man, every difficulty retires and all the parts are brought into cordial unison There the poor are not oppressed, the rich are not privileged Industry is not mortified by the splendid extravagance of a court rioting at its expense Their taxes are few because their government is just, and as there is nothing to render them wretched, there is nothing to engender riots and tumults

A metaphysical man like Mr Burke would have tortured his invention to discover how such a people could be governed He would have supposed that some must be managed by fraud, others

[b] That part of America which is generally called New England, including New Hampshire Massachusetts Rhode Island, and Connecticut, is peopled chiefly by English descendants In the State of New York, about half are Dutch, the rest English Scotch, and Irish In New Jersey a mixture of English and Dutch [illegible]
lish, a[illegible]
The s[illegible]
middl[illegible]
ated, [illegible] number of French and some few of all the European nations lying on the coast The most numerous religious denomination is the Presbyterian, but no one sect is established above another, and all men are equally citizens.

laws that civilized life requires, and those of such common usefulness that whether they are enforced by the forms of government or not the effect will be nearly the same If we consider what the principles are that first condense men into society and what the motives that regulate their mutual intercourse afterward, we shall find, by the time we arrive at what is called government, that nearly the whole of the business is performed by the natural operation of the parts upon each other

Man, with respect to all those matters, is more a creature of consistency than he is aware or that governments would wish him to believe All the great laws of society are laws of nature Those of trade and commerce whether with respect to the intercourse of individuals or of nations are laws of mutual and reciprocal interest They are followed and obeyed because it is the interest *of the parties so to do and not on account of any formal* laws their governments may impose or interpose

But how often is the natural propensity to society disturbed or destroyed by the operations of government When the latter, instead of being ingrafted on the principles of the former, assumes to exist for itself and acts by partialities of favor and oppression, it becomes the cause of the mischiefs it ought to prevent

If we look back to the riots and tumults which at various times have happened in England we shall find that they did not proceed from the want of a government but that government was itself the generating cause instead of consolidating society it divided it, it deprived it of its natural cohesion and engendered discontents and disorders which otherwise would not have existed

In those associations which men promiscuously form for the purpose of trade or of any concern in which government is totally out of the question and in which they act merely on the principles of society, we see how naturally the various parties unite, and this shows by comparison that governments so far from being always the cause or means of order, are often the destruction of it The riots of 1780[1] had no other source than the remains of those prejudices which the government itself had encouraged But with respect to England there are also other causes

Excess and inequality of taxation however disguised in the

ciety as the means of universal commerce The one measures its prosperity by the quantity of revenue it extorts, the other proves its excellence by the small quantity of taxes it requires

Mr Burke has talked of "old and new Whigs" If he can amuse himself with childish names and distinctions, I shall not interrupt his pleasure It is not to him, but to Abbe Sieyès,[2] that I address this chapter I am already engaged to the latter gentleman to discuss the subject of monarchical government, and as it naturally occurs in comparing the old and new systems, I make this the opportunity of presenting to him my observations I shall occasionally take Mr Burke in my way

Though it might be proved that the system of government now called the 'new' is the most ancient in principle of all that have existed, being founded on the original inherent rights of man yet, as tyranny and the sword have suspended the exercise of those rights for many centuries past it serves better the purpose of distinction to call it a new' than to claim the right of calling it the old

The first general distinction between those two systems is that the one now called the old is *hereditary*, either in whole or in part and the new is entirely *representative* It rejects all hereditary government

First, as being an imposition on mankind

Secondly as being inadequate to the purposes for which government is necessary

With respect to the first of these heads It cannot be proved by what right hereditary government could begin neither does there exist within the compass of mortal power a right to establish it Man has no authority over posterity in matters of personal right and therefore no man or body of men had or can have a right to set up hereditary government Were even ourselves to come again into existence, instead of being succeeded by posterity we have not now the right of taking from ourselves the rights which would then be ours On what ground, then, do we pretend to take them from others?

All hereditary government is in its nature tyranny A heritable

by force, and all by some contrivance, that genius must be hired to impose upon ignorance, and show and parade to fascinate the vulgar Lost in the abundance of his researches, he would have resolved and re resolved, and finally overlooked the plain and easy road that lay directly before him

One of the great advantages of the American Revolution has been that it led to a discovery of the principles and laid open the imposition of governments All the revolutions till then had been worked within the atmosphere of a court, and never on the great floor of a nation The parties were always of the class of courtiers, and whatever was their rage for reformation, they carefully pre served that fraud of the profession

In all cases they took care to represent government as a thing made up of mysteries, which only themselves understood, and they hid from the understanding of the nation the only thing that was beneficial to know, namely, *that government is nothing more than a national association acting on the principles of society*

Having thus endeavored to show that the social and civilized state of man is capable of performing within itself almost everything necessary to its protection and government, it will be proper, on the other hand, to take a review of the present old governments and examine whether their principles and practice are corre spondent thereto

OF THE OLD AND NEW SYSTEMS OF GOVERNMENT[c]

Nothing can appear more contradictory than the principles on which the old governments began and the condition to which society, civilization and commerce are capable of carrying man kind Government on the old system is an assumption of power for the aggrandizement of itself on the new, a delegation of power for the common benefit of society The former supports itself by keeping up a system of war, the latter promotes a sys tem of peace as the true means of enriching a nation The one encourages national prejudices, the other promotes universal so

[c] [Part II Chapter III]

invariably appertain to hereditary succession, the objections to it would be removed, but when we see that nature acts as if she disowned and sported with the hereditary system, that the mental characters of successors in all countries are below the average of human understanding, that one is a tyrant, another an idiot, a third insane, and some all three together, it is impossible to attach confidence to it when reason in man has power to act

It is not to the Abbe Sieyes that I need apply this reasoning, he has already saved me that trouble by giving his own opinion upon the case "If it be asked," says he, "what is my opinion with respect to hereditary right, I answer without hesitation that, in good theory, a hereditary transmission of any power or office can never accord with the laws of a true representation Hereditaryship is, in this sense, as much an attaint upon principle as an outrage upon society But let us," continues he, "refer to the history of all elective monarchies and principalities, is there one in which the elective mode is not worse than the hereditary succession?"

As to debating on which is the worse of the two is admitting both to be bad, and herein we are agreed The preference which the Abbé has given is a condemnation of the thing he prefers Such a mode of reasoning on such a subject is inadmissible, because it finally amounts to an accusation upon Providence, as if she had left to man no other choice with respect to government than between two evils, the best of which he admits to be "an attaint upon principle and an outrage upon society"

Passing over, for the present, all the evils and mischiefs which monarchy has occasioned in the world, nothing can more effectually prove its uselessness in a state of *civil government* than making it hereditary Would we make any office hereditary that required wisdom and abilities to fill it? And where wisdom and abilities are not necessary, such an office, whatever it may be, is superfluous or insignificant

Hered tar[illegible]

[illegible]ou mechanic, but to be a king requires only the animal figure of

crown or a heritable throne, or by what other fanciful name such things may be called, have no other significant explanation than that mankind are heritable property To inherit a government is to inherit the people, as if they were flocks and herds

With respect to the second head, that of being inadequate to the purposes for which government is necessary, we have only to consider what government essentially is and compare it with the circumstances to which hereditary succession is subject Government ought to be a thing always in maturity It ought to be so constructed as to be superior to all the accidents to which individual man is subject, and therefore hereditary succession, by being *subject to them all*, is the most irregular and imperfect of all the systems of government

We have heard the rights of man called a *leveling* system, but the only system to which the word "leveling" is truly applicable is the hereditary monarchical system It is a system of *mental leveling* It indiscriminately admits every species of character to the same authority Vice and virtue, ignorance and wisdom, in short, every quality, good or bad, is put on the same level Kings succeed each other, not as rationals, but as animals It signifies not what their mental or moral characters are

Can we then be surprised at the abject state of the human mind in monarchical countries when the government itself is formed on such an abject leveling system? It has no fixed character To-day it is one thing, tomorrow it is something else *It changes with the* temper of every succeeding individual and is subject to all the varieties of each It is government through the medium of passions and accidents

It appears under all the various characters of childhood, decrepitude, dotage, a thing at nurse, in leading strings, or on crutches It reverses the wholesome order of nature It occasionally puts children over men, and the conceits of nonage over wisdom and experience In short we cannot conceive a more ridiculous figure of government than hereditary succession, in all its cases, presents

Could it be made a decree in nature or an edict registered in heaven, and man could know it that virtue and wisdom should

kind, to the same cause It is by adding the evil of hereditary succession to that of monarchy that a permanent family interest is created whose constant objects are dominion and revenue Poland, though an elective monarchy, has had fewer wars than those which are hereditary, and it is the only government that has made a voluntary essay, though but a small one, to reform the condition of the country

Having thus glanced at a few of the defects of the old or hereditary system of government, let us compare it with the new or representative system

The representative system takes society and civilization for its basis, nature, reason, and experience for its guide

Experience, in all ages, and in all countries, has demonstrated that it is impossible to control nature in her distribution of mental powers She gives them as she pleases Whatever is the rule by which she, apparently to us, scatters them among mankind, that rule remains a secret to man It would be as ridiculous to attempt to fix the hereditaryship of human beauty as of wisdom

Whatever wisdom constituently is, it is like a seedless plant, it may be reared when it appears, but it cannot be voluntarily produced There is always a sufficiency somewhere in the general mass of society for all purposes, but with respect to the parts of society, it is continually changing its place It rises in one today, in another tomorrow, and has most probably visited in rotation every family of the earth and again withdrawn

As this is the order of nature the order of government must necessarily follow it, or government will, as we see it does, degenerate into ignorance The hereditary system, therefore, is as repugnant to human wisdom as to human rights and is as absurd as it is unjust

As the republic of letters brings forward the best literary productions by giving to genius a fair and universal chance, so the representative system of government is calculated to produce the wisest laws by collecting wisdom where it can be found I smile to myself when I contemplate the ridiculous insignificance into which literature and all the sciences would sink were they made hereditary, and I carry the same idea into governments A heredi-

a man—a sort of breathing automaton This sort of superstition may last a few years more but it cannot long resist the awakened reason and interest of man

As to Mr Burke he is a stickler for monarchy not altogether as a pensioner—if he is one which I believe—but as a political man He has taken up a contemptible opinion of mankind who in their turn are taking up the same of him He considers them as a herd of beings that must be governed by fraud effigy and show and an idol would be as good a figure of monarchy with him as a man I will however do him the justice to say that with respect to America he has been very complimentary He always contended at least in my hearing that the people of America are more enlightened than those of England or of any other country in Europe and that therefore the imposition of show was not necessary in their government

Though the comparison between hereditary and elective monarchy which the Abbé has made is unnecessary to the case because the representative system rejects both yet were I to make the comparison I should decide contrary to what he has done

The civil wars which have originated from contested hereditary claims are numerous and have been more dreadful and of longer continuance than those which have been occasioned by election All the civil wars in France arose from the hereditary system they were either produced by hereditary claims or by the imperfection of the hereditary form which admits of regencies or monarchies at nurse

With respect to England its history is full of the same misfortunes The contests for succession between the houses of York and Lancaster lasted a whole century and others of a similar nature have renewed themselves since that period Those of 1715 and 1745[8] were of the same kind The succession war for the crown of Spain embroiled almost half of Europe The disturbances in Holland are generated from the hereditaryship of the stadtholder A government calling itself free with a hereditary office is like a thorn in the flesh that produces a fermentation which endeavors to discharge it

But I might go further and place also foreign wars of whatever

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tary governor is as inconsistent as a hereditary author I know not whether Homer or Euclid had sons, but I will venture an opinion that if they had, and had left their works unfinished, those sons could not have completed them

Do we need a stronger evidence of the absurdity of hereditary government than is seen in the descendants of those men in any line of life, who once were famous? Is there scarcely an instance in which there is not a total reverse of character? It appears as if the tide of mental faculties flowed as far as it could in certain channels, and then forsook its course and arose in others How irrational then is the hereditary system which establishes channels of power, in company with which wisdom refuses to flow! By continuing this absurdity, man is perpetually in contradiction with himself, he accepts for a king or a chief magistrate or a legislator a person whom he would not elect for a constable

It appears to general observation that revolutions create genius and talents, but those events do no more than bring them forward There is existing in man a mass of sense lying in a dormant state and which, unless something excites it to action, will descend with him, in that condition to the grave As it is to the advantage of society that the whole of its faculties should be employed, the construction of government ought to be such as to bring forward, by a quiet and regular operation, all that extent of capacity which never fails to appear in revolutions

This cannot take place in the insipid state of hereditary government, not only because it prevents but because it operates to benumb When the mind of a nation is bowed down by any political superstition in its government such as hereditary succession is, it loses a considerable portion of its powers on all other subjects and objects

Hereditary succession requires the same obedience to ignorance as to wisdom and when once the mind can bring itself to pay this indiscriminate reverence it descends below the stature of mental manhood It is fit to be great only in little things It acts a treachery upon itself and suffocates the sensations that urge to detection

Though the ancient governments present to us a miserable pic-

ture of the condition of man, there is one which, above all others, exempts itself from the general description I mean the democracy of the Athenians We see more to admire and less to condemn in that great, extraordinary people than in anything which history affords

Mr Burke is so little acquainted with constituent principles of government that he confounds democracy and representation together Representation was a thing unknown in the ancient democracies In those the mass of the people met and enacted laws (grammatically speaking) in the first person

Simple democracy was no other than the common hall of the ancients It signifies the *form* as well as the public principle of the government As these democracies increased in population and the territory extended, the simple democratical form became unwieldy and impracticable, and as the system of representation was not known, the consequence was they either degenerated convulsively into monarchies or became absorbed into such as then existed

Had the system of representation been then understood as it now is there is no reason to believe that those forms of government now called monarchical and aristocratical would ever have taken place It was the want of some method to consolidate the parts of society, after it became too populous and too extensive for the simple democratical form, and also the lax and solitary condition of shepherds and herdsmen in other parts of the world, that afforded opportunities to those unnatural modes of government to begin

As it is necessary to clear away the rubbish of errors into which the subject of government has been thrown, I shall proceed to remark on some others

It has always been the political craft of courtiers and court governments to abuse something which they called "republicanism," but what republicanism was or is they never attempt to explain Let us examine a little into this case

The only forms of government are the democratical, the aristocratical the monarchical, and what is now called the representative

What is called a "republic" is not any *particular form* of govern-

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and population And, in the second place, if they meant anything with respect to *form*, it was the simple democratical form, such as was the mode of government in the ancient democracies, in which there was no representation The case, therefore, is not that a republic cannot be extensive, but that it cannot be extensive on the simple democratical form, and the question naturally presents itself, 'What is the best form of government for conducting the *res publica*, or the public business of a nation, after it becomes too extensive and populous for the simple democratical form?"

It cannot be monarchy, because monarchy is subject to an objection of the same amount to which the simple democratical form was subject

It is possible that an individual may lay down a system of principles on which government shall be constitutionally established to any extent of territory This is no more than an operation of the mind acting by its own powers But the practice upon those principles, as applying to the various and numerous circumstances of a nation, its agriculture, manufacture, trade, commerce, etc, requires a knowledge of a different kind and which can be had only from the various parts of society

It is an assemblage of practical knowledge which no one individual can possess, and therefore the monarchical form is as much limited in useful practice from the incompetency of knowledge as was the democratical form from the multiplying of population The one degenerates, by extension, into confusion, the other, into ignorance and incapacity, of which all the great monarchies are in evidence The monarchical form, therefore, could not be a substitute for the democratical, because it has equal inconveniences

Much less could it when made hereditary This is the most effectual of all forms to preclude knowledge Neither could the high democratical mind have voluntarily yielded itself to be governed by children and idiots and all the motley insignificance of character which attends such a mere animal system, the disgrace and the reproach of reason and of man

As to the aristocratical form, it has the same vices and defects with the monarchical, except that the chance of abilities is better

ment It is wholly characteristical of the purport, matter, or object for which a government ought to be instituted and on which it is to be employed *res publica*, "the public affairs," or "the public good or, literally translated, the "public thing"

It is a word of a good original referring to what ought to be the character and business of government and in this sense it is naturally opposed to the word 'monarchy which has a base original signification It means arbitrary power in an individual person, in the exercise of which *himself*, and not the *res publica*, is the object

Every government that does not act on the principle of a *republic* or in other words that does not make the *res publica* its whole and sole object, *is not a good government* Republican *government is no other than government established and conducted for the interest of the public as well individually as collectively It is not necessarily connected with any particular form, but it most naturally associates with the representative form, as being best calculated to secure the end for which a nation is at the expense of supporting it*

Various forms of government have affected to style themselves a republic Poland calls itself a republic which is a hereditary aristocracy with what is called an elective monarchy Holland calls itself a republic which is chiefly aristocratical with a hereditary stadtholdership

But the government of America which is wholly on the system of representation is the only real republic in character and practice that now exists Its government has no other object than the public business of the nation and therefore it is properly a republic and the Americans have taken care that *this* and no other, shall always be the object of the government by their rejecting everything hereditary and establishing government on the system of representation only

Those who have said that a republic is not a *form* of government calculated for countries of great extent mistook in the first place the *business* of a government for a *form* of government for the *res publica* equally appertains to every extent of territory

That which is called government, or rather that which we ought to conceive government to be, is no more than some common center in which all the parts of society unite This cannot be accomplished by any method so conducive to the various interests of the community as by the representative system

It concentrates the knowledge necessary to the interests of the parts and of the whole It places government in a state of constant maturity It is, as has been already observed never young never old. It is subject neither to nonage nor dotage It is never in the cradle nor on crutches It admits not of a separation between knowledge and power, and is superior as government always ought to be to all the accidents of individual man, and is therefore superior to what is called monarchy

A nation is not a body the figure of which is to be represented by the human body, but is like a body contained within a circle having a common center in which every radius meets, and that center is formed by representation To connect representation with what is called monarchy is eccentric government Representation is of itself the delegated monarchy of a nation and cannot debase itself by dividing it with another

Mr Burke has two or three times in his parliamentary speeches and in his publications, made use of a jingle of words that convey no ideas Speaking of government he says it is better to have monarchy for its basis and republicanism for its corrective than republicanism for its basis and monarchy for its corrective" If he means that it is better to correct folly with wisdom than wisdom with folly, I will not otherwise contend with him than that it would be much better to reject the folly entirely

But what is this thing that Mr Burke calls monarchy? Will he explain *it*? All men can understand what representation is, and that it must necessarily include a variety of knowledge and talents But what security is there for the same qualities on the part of monarchy? Or when this monarchy is a child, where then is the wisdom? What does it know about government? Who then is the monarch or where is the monarchy? If it is to be performed by regency it proves to be a farce

A regency is a mock species of republic and the whole of mon

from the proportion of numbers but there is still no security for the right use and application of them [a]

Referring then to the original simple democracy, it affords the true data from which government on a large scale can begin It is incapable of extension not from its principle but from the inconvenience of its form and monarchy and aristocracy from their incapacity *Retaining then democracy as the ground and rejecting the corrupt systems of monarchy and aristocracy, the representative system naturally presents itself remedying at once the defects of the simple democracy as to form and the incapacity of the other two with respect to knowledge*

Simple democracy was society governing itself without the aid of secondary means By ingrafting representation upon democracy we arrive at a system of government capable of embracing and confederating all the various interests and every extent of territory and population and that also with advantages as much superior to hereditary government as the republic of letters is to hereditary literature

It is on this system that the American government is founded It is representation ingrafted upon democracy It has fixed the form by a scale parallel in all cases to the extent of the principle What Athens was in miniature America will be in magnitude The one was the wonder of the ancient world the other is becoming the admiration and model of the present It is the easiest of all the forms of government to be understood and the most eligible in practice and excludes at once the ignorance and insecurity of the hereditary mode and the inconvenience of the simple democracy

It is impossible to conceive a system of government capable of acting over such an extent of territory and such a circle of interests as is immediately produced by the operation of representation France great and popular as it is is but a spot in the capaciousness of the system It adapts itself to all possible cases It is preferable to simple democracy even in small territories Athens by representation would have outrivaled her own democracy

[a] For a character of aristocracy the reader is referred to *Rights of Man* Part I page [88]

man becomes matured and he has lived long enough to be acquainted with men and things and the country with him

But on the monarchial plan (exclusive of the numerous chances there are against every man born into the world of drawing a prize in the lottery of human faculties) the next in succession, whatever he may be, is put at the head of a nation and of a government at the age of eighteen years

Does this appear like an act of wisdom? Is it consistent with the proper dignity and the manly character of a nation? Where is the propriety of calling such a lad the father of the people? In all other cases a person is a minor until the age of twenty-one years Before this period he is not trusted with the management of an acre of land, or with the heritable property of a flock of sheep or a herd of swine, but, wonderful to tell! he may, at the age of eighteen years, be trusted with a nation

That monarchy is all a bubble, a mere court artifice to procure money, is evident (at least to me) in every character in which it can be viewed It would be impossible on the rational system of representative government, to make out a bill of expenses to such an enormous amount as this deception admits Government is not of itself a very chargeable institution The whole expense of the Federal Government of America founded, as I have already said, on the system of representation and extending over a country nearly ten times as large as England, is but six hundred thousand dollars or one hundred and thirty thousand pounds sterling

I presume that no man in his sober senses will compare the character of any of the kings of Europe with that of General Washington Yet in France and also in England, the expense of the civil list only for the support of one man is eight times greater than the whole expense of the Federal Government in America To assign a reason for this appears almost impossible The generality of people in America especially the poor, are more able to pay taxes than the generality of people either in France or England But the case is that the representative system diffuses such a body of knowledge throughout a nation on the subject of government as to explode ignorance and preclude imposition The craft of courts cannot be acted on that ground There is no place

archy deserves no better description It is a thing as various as imagination can paint It has none of the stable character that government ought to possess Every succession is a revolution, and every regency a counterrevolution The whole of it is a scene of perpetual court cabal and intrigue, of which Mr Burke is himself an instance

To render monarchy consistent with government, the next in succession should not be born a child but a man at once, and that man a Solomon It is ridiculous that nations are to wait and government be interrupted till boys grow to be men

Whether I have too little sense to see or too much to be imposed upon, whether I have too much or too little pride or of anything else I leave out of the question but certain it is that what is called monarchy always appears to me a silly contemptible thing I compare it to something kept behind a curtain about which there is a great deal of bustle and fuss and a wonderful air of seeming solemnity, but when by any accident the curtain happens to open and the company see what it is they burst into laughter

In the representative system of government nothing of this can happen Like the nation itself it possesses a perpetual stamina, as well of body as of mind and presents itself on the open theater of the world in a fair and manly manner Whatever are its excellences or its defects, they are visible to all It exists not by fraud and mystery it deals not in cant and sophistry but inspires a language that passing from heart to heart is felt and understood

We must shut our eyes against reason we must basely degrade our understanding not to see the folly of what is called monarchy Nature is orderly in all her works but this is a mode of government that counteracts nature It turns the progress of the human faculties upside down It subjects age to be governed by children and wisdom by folly On the contrary the representative system is always parallel with the order and immutable laws of nature and meets the reason of man in every part For example

In the American Federal Government more power is delegated to the President of the United States than to any other individual member of Congress * He cannot therefore be elected to this office under the age of thirty five years By this time the judgment of

the facts that have arisen in our own day We have no occasion to roam for information into the obscure field of antiquity, nor hazard ourselves upon conjecture We are brought at once to the point of seeing government begin, as if we had lived in the beginning of time The real volume, not of history but of facts, is directly before us, unmutilated by contrivance or the errors of tradition

I will here concisely state the commencement of the American constitutions, by which the difference between constitutions and government will sufficiently appear

It may not be improper to remind the reader that the United States of America consist of thirteen separate states, each of which established a government for itself after the Declaration of Independence, done the fourth of July, 1776 Each state acted independently of the rest in forming its government, but the same general principle pervades the whole When the several state governments were formed, they proceeded to form the Federal Government, that acts over the whole in all matters which concern the interest of the whole or which relate to the intercourse of the several states with each other or with foreign nations I will begin with giving an instance from one of the state governments (that of Pennsylvania) and then proceed to the Federal Government

The state of Pennsylvania, though nearly of the same extent of territory as England, was then divided into only twelve counties Each of those counties had elected a committee at the commencement of the dispute with the English government, and as the city of Philadelphia, which also had its committee, was the most central for intelligence, it became the center of communication to the several county committees When it became necessary to proceed to the formation of a go[illegible]
proposed a [illegible]
that city, a [illegible] July, 1776

Though these committees had been elected by the people, they were not elected expressly for the purpose, nor invested with the authority of forming a constitution and as they could not, consistently with the American idea of rights, assume such a power, they could only confer upon the matter and put it into a train of

for mystery, nowhere for it to begin Those who are not in the representation know as much of the nature of business as those who are An affectation of mysterious importance would there be scouted Nations can have no secrets, and the secrets of courts, like those of individuals, are always their defects

In the representative system, the reason for everything must publicly appear Every man is a proprietor in government and considers it a necessary part of his business to understand It concerns his interest, because it affects his property He examines the cost and compares it with the advantages and above all, he does not adopt the slavish custom of following what in other governments are called leaders

It can only be by blinding the understanding of man, and making him believe that government is some wonderful mysterious thing, that excessive revenues are obtained Monarchy is well calculated to ensure this end It is the popery of government a thing kept up to amuse the ignorant and quiet them into paying taxes

The government of a free country, properly speaking is not in the persons but in the laws The enacting of those requires no great expense, and when they are administered, the whole of civil government is performed—the rest is all court contrivance

OF CONSTITUTIONS *

That men mean distinct and separate things when they speak of constitutions and of government is evident, or why are those terms distinctly and separately used? A constitution is not the act of a government but of a people constituting a government, and government without a constitution is power without a right

All power exercised over a nation must have some beginning It must be either delegated or assumed There are no other sources All delegated power is trust and all assumed power is usurpation Time does not alter the nature and quality of either

In viewing this subject the case and circumstances of America present themselves as in the beginning of the world and our inquiry into the origin of government is shortened by referring to

* [Chapter IV Part II]

the constitution and making alterations, additions, or abolitions therein, if any such should be found necessary

Here we see a regular process—a government issuing out of a constitution, formed by the people in their original character, and that constitution serving, not only as an authority, but as a law of control to the government It was the political bible of the state Scarcely a family was without it Every member of the government had a copy, and nothing was more common when any debate arose on the principle of a bill, or on the extent of any species of authority, than for the members to take the printed constitution out of their pocket and read the chapter with which such a matter in debate was connected

Having thus given an instance from one of the states, I will show the proceedings by which the Federal Constitution of the United States arose and was formed

Congress, at its two first meetings in September 1774 and May 1775, was nothing more than a deputation from the legislatures of the several provinces, afterward states, and had no other authority than what arose from common consent and the necessity of its acting as a public body In everything which related to the internal affairs of America, Congress went no farther than to issue recommendations to the several provincial assemblies, who at discretion adopted them or not

Nothing on the part of Congress was compulsive, yet, in this situation, it was more faithfully and affectionately obeyed than was any government in Europe This instance, like that of the National Assembly of France, sufficiently shows that the strength of government does not consist in anything *within* itself, but in the attachment of a nation and the interest which the people feel in supporting it When this is lost government is but a child in power, and though like the old government of France, it may harass individuals for a while, it but facilitates its own fall

After the Declaration of Independence, it became consistent with the principle on which representative government is founded that the authority of Congress should be defined and established Whether that authority should be more or less than Congress then

operation The conferees, therefore, did no more than state the case and recommend to the several counties to elect six representatives for each county, to meet in convention at Philadelphia, with powers to form a constitution and propose it for public consideration

This convention, of which Benjamin Franklin[5] was president, having met and deliberated and agreed upon a constitution they next ordered it to be published, not as a thing established but for the consideration of the whole people, their approbation or rejection, and then adjourned to a stated time

When the time of the adjournment was expired, the convention re assembled, and as the general opinion of the people in approbation of it was then known, the constitution was signed, sealed and proclaimed on the *authority of the people*, and the original instrument deposited as a public record

The convention then appointed a day for the general election of the representatives who were to compose the Government and the time it should commence, and having done this they dissolved and returned to their several homes and occupations

In this constitution were laid down, first, a declaration of rights Then followed the form which the government should have and the powers it should possess the authority of the courts of judicature and of juries the manner in which elections should be conducted and the proportion of representatives to the number of electors, the time which each succeeding assembly should continue, which was one year the mode of levying and of accounting for the expenditure of public money, of appointing public officers, etc

No article of this constitution could be altered or infringed at the discretion of the government that was to ensue It was to that government a law But as it would have been unwise to preclude the benefit of experience, and in order also to prevent the accumulation of errors, if any should be found, and to preserve a unison of government with the circumstances of the state at all times the constitution provided that, at the expiration of every seven years a convention should be elected for the express purpose of revising

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Numerous publications, in pamphlets and in the newspapers, appeared on the propriety and necessity of new modeling the Federal Government After some time of public discussion, carried on through the channel of the press and in conversations, the state of Virginia experiencing some inconvenience with respect to commerce, proposed holding a continental conference, in consequence of which a deputation from five or six of the state assemblies met at Annapolis in Maryland in 1786

This meeting, not conceiving itself sufficiently authorized to go into the business of reform, did no more than state their general opinions of the propriety of the measure, and recommended that a convention of all the states should be held the year following

This convention met at Philadelphia in May, 1787, of which General Washington was elected President He was not at that time connected with any of the state governments or with Congress He delivered up his commission when the war ended and since then had lived a private citizen The convention went deeply into all the subjects, and having after a variety of debate and investigation, agreed among themselves upon the several parts of a Federal Constitution, the next question was the manner of giving it authority and practice

For this purpose, they did not, like a cabal of courtiers, send for a Dutch stadtholder or a German elector [6] but they referred the whole matter to the sense and interest of the country

They first directed that the proposed Constitution should be published Secondly, that each state should elect a convention expressly for the purpose of taking it into consideration and of ratifying or rejecting it, and that as soon as the approbation and ratification of any nine states should be given, that those states should proceed to the election of their proportion of members to the new Federal Government and that the operation of it should then begin and the former Federal Government cease

The several states proceeded accordingly to elect their conventions Some of those conventions ratified the Constitution by very large majorities and two or three unanimously In others there were much debate and division of opinion In the Massachusetts Convention which met at Boston, the majority was not above

discretionally exercised was not the question It was merely the rectitude of the measure

For this purpose, the act called the Act of Confederation (which was a sort of imperfect federal constitution) was proposed and after long deliberation, was concluded in the year 1781 It was not the act of Congress, because it is repugnant to the principles of representative government that a body should give power to itself Congress first informed the several states of the powers which it conceived were necessary to be invested in the union, to enable it to perform the duties and services required from it, and the states severally agreed with each other and concentrated in Congress those powers

It may not be improper to observe that in both those instances (the one of Pennsylvania and the other of the United States) there is no such thing as the idea of a compact between the people on one side and the government on the other The compact was that of the people with each other, to produce and constitute a government

To suppose that any government can be a party in a compact with the whole people is to suppose it to have existence before it can have a right to exist The only instance in which a compact can take place between the people and those who exercise the government is that the people shall pay them while they choose to employ them

Government is not a trade which any man or body of men has a right to set up and exercise for his own emolument, but is altogether a trust, in right of those by whom that trust is delegated and by whom it is always resumable It has of itself no rights, they are altogether duties

Having thus given two instances of the original formation of a constitution, I will show the manner in which both have been changed since their first establishment

The powers vested in the governments of the several states by the state constitutions were found, upon experience, to be too great, and those vested in the Federal Government by the Act of Confederation too little The defect was not in the principle, but in the distribution of power

no right to make itself a party in any debates respecting the principles or mode of forming or of changing constitutions

It is not for the benefit of those who exercise the powers of government that constitutions and the governments issuing from them are established In all those matters the right of judging and acting are in those who pay and not in those who receive

A constitution is the property of a nation and not of those who exercise the government. All the constitutions of America are declared to be established on the authority of the people In France the word nation" is used instead of the people but in both cases a constitution is a thing antecedent to the government and always distinct therefrom

In England it is not difficult to perceive that everything has a constitution except the nation Every society and association that is established first agreed upon a number of original articles digested into form, which are its constitution It then appointed its officers whose powers and authorities are described in that constitution and the government of that society then commenced Those officers, by whatever name they are called have no authority to add to alter or abridge the original articles It is only to the constituting power that this right belongs

[GOVERNMENT BY REPRESENTATION VERSUS GOVERNMENT BY PRECEDENT]

From the want of a constitution in England to restrain and regulate the wild impulse of power many of the laws are irrational and tyrannical and the administration of them vague and problematical

The attention of the government of England (for I rather choose to call it by this name than the English government) appears since its political connection with Germany [8] to have been so completely engrossed and absorbed by foreign affairs and the means of raising taxes that it seems to exist for no other purposes Domestic concerns are neglected and with respect to regular law there is scarcely such a thing

nineteen or twenty in about three hundred members, but such is the nature of representative government that it quietly decides all matters by majority

After the debate in the Massachusetts Convention was closed and the vote taken, the objecting members rose and declared

> That though they had argued and voted against it because certain parts appeared to them in a different light to what they appeared to other members yet as the vote had decided in favor of the Constitution as proposed they should give it the same practical support as if they had voted for it

As soon as nine states[7] had concurred (and the rest followed in the order their conventions were elected) the old fabric of the Federal Government was taken down and the new one elected of which General Washington is President In this place I cannot help remarking that the character and services of this gentleman are sufficient to put all those men called kings to shame

While they are receiving from the sweat and labors of mankind a prodigality of pay to which neither their abilities nor their services can entitle them he is rendering every service in his power and refusing every pecuniary reward He accepted no pay as Commander in Chief he accepts none as President of the United States

After the new Federal Constitution was established the state of Pennsylvania conceiving that some parts of its own constitution required to be altered elected a convention for that purpose The proposed alterations were published and the people concurring therein they were established

In forming those constitutions or in altering them little or no inconvenience took place The ordinary course of things was not interrupted and the advantages have been much It is always the interest of a far greater *number of people in a nation* to have things right than to let them remain wrong and when public matters are open to debate and the public judgment free it will not decide wrong unless it decides too hastily

In the two instances of changing the constitutions the governments then in being were not actors either way Government has

ghosts of departed wisdom? How strangely is antiquity treated! To answer some purposes it is spoken of as the times of darkness and ignorance, and to answer others it is put for the light of the world

If the doctrine of precedents is to be followed, the expenses of government need not continue the same Why pay men extravagantly who have but little to do? If everything that can happen is already in precedent legislation is at an end and precedent, like a dictionary determines every case Either, therefore, government has arrived at its dotage and requires to be renovated or all the occasions for exercising its wisdom have occurred

We now see all over Europe and particularly in England the curious phenomenon of a nation looking one way and the government the other—the one forward and the other backward If governments are to go on by precedent while nations go on by improvement they must at last come to a final separation and the sooner and the more civilly they determine this point, the better it will be for them[*]

Having thus spoken of constitutions generally as things distinct from actual governments let us proceed to consider the parts of which a constitution is composed

Opinions differ more on this subject than with respect to the whole That a nation ought to have a constitution as a rule for the conduct of its government is a simple question to which all men not directly courtiers will agree It is only on the component parts that questions and opinions multiply

But this difficulty, like every other, will diminish when put into

[*] In England, the improvements in agriculture useful arts manufactures and commerce have been made in opposition to the genius of its government which is that of following precedents It is from the enterprise and industry of the individuals and their numerous associations in which tritely speaking government is neither pillow nor bolster that these improvements have proceeded. No man thought about the government or who was *in* or who was *out* when he was planning or executing those things and all he had to hope with respect to government was that it would let him alone Three or four very silly ministerial newspapers are continually offending against the spirit of national improvement by ascribing it to a minister They may with as much truth ascribe this book to a minister

Almost every case must now be determined by some precedent be that precedent good or bad or whether it properly applies or not and the practice has become so general as to suggest a suspicion that it proceeds from a deeper policy than at first sight appears

Since the revolution of America and more so since that of France this preaching up the doctrine of precedents drawn from times and circumstances antecedent to those events has been the studied practice of the English government The generality of those precedents are founded on principles and opinions the reverse of what they ought to be and the greater distance of time they are drawn from the more they are to be suspected

But by associating those precedents with a superstitious reverence for ancient things as monks show relics and call them holy the generality of mankind are deceived into the design Governments now act as if they were afraid to awaken a single reflection in man They are softly leading him to the sepulcher of precedents to deaden his faculties and call his attention from the scene of revolutions

They feel that he is arriving at knowledge faster than they wish and their policy of precedents is the barometer of their fears This political popery like the ecclesiastical popery of old has had its day and is hastening to its exit The ragged relic and the antiquated precedent the monk and the monarch will molder together

Government by precedent without any regard to the principle of the precedent is one of the vilest systems that can be set up In numerous instances the precedent ought to operate as a warning and not as an example and requires to be shunned instead of imitated but instead of this precedents are taken in the lump and put at once for constitution and for law

Either the doctrine of precedents is policy to keep a man in a state of ignorance or it is a practical confession that wisdom degenerates in governments as governments increase in age and can only hobble along by the stilts and crutches of precedents

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They feel that he is arriving at knowledge faster than they wish, and their policy of precedents is the barometer of their fears. This political popery, like the ecclesiastical popery of old, has had its day and is hastening to its exit. The ragged relic and the antiquated precedent, *the monk and the monarch*, will molder together.

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any other clear idea with respect to the official execution of the laws In England, and also in America and France, this power begins with the magistrate and proceeds up through all the courts of judicature

I leave to courtiers to explain what is meant by calling monarchy the executive power It is merely a name in which acts of government are done, and any other, or none at all, would answer the same purpose

Laws have neither more nor less authority on this account It must be from the justness of their principles and the interest which a nation feels therein that they derive support, if they require any other than this it is a sign that something in the system of government is imperfect Laws difficult to be executed cannot be generally good

With respect to the organization of the *legislative power*, different modes have been adopted in different countries In America, it is generally composed of two houses In France, it consists of but one but in both countries it is wholly by representation

The case is that mankind (from the long tyranny of assumed power) have had so few opportunities of making the necessary trials on modes and principles of government, in order to discover the best, *that government is but now beginning to be known*, and experience is yet wanting to determine many particulars

The objections against two houses are *first*, that there is an inconsistency in any part of a whole legislature coming to a final determination by vote on any matter, whilst *that matter*, with respect to *that whole* is yet only in a train of deliberation, and consequently open to new illustrations

Secondly, that by taking the vote on each as a separate body, it always admits of the possibility and is often the case in practice that the minority governs the majority, and that, *in some instances*, to a great degree of inconsistency

Thirdly, that two houses arbitrarily checking or controlling each other is inconsistent because it cannot be proved, on the principles of just representation that either should be wiser or better than the other They may check in the wrong as well as in

a train of being rightly understood The first thing is that a nation has a right to establish a constitution

Whether it exercises this right in the most judicious manner at first it is quite another case It exercises it agreeably to the judgment it possesses, and by continuing to do so, all errors will at last be exploded

When this right is established in a nation there is no fear that it will be employed to its own injury A nation can have no interest in being wrong

Though all the constitutions of America are on one general principle yet no two of them are exactly alike in their component parts or in the distribution of the powers which they give to the actual governments Some are more and others less complex

In forming a constitution it is first necessary to consider what are the ends for which government is necessary secondly what are the best means and the least expensive for accomplishing those ends

Government is nothing more than a national association and the object of this association is the good of all as well individually as collectively Every man wishes to pursue his occupation and enjoy the fruits of his labors and the produce of his property in peace and safety and with the least possible expense When these things are accomplished all the objects for which government ought to be established are answered

It has been customary to consider government under three distinct general heads the legislative the executive and the judicial

But if we permit our judgment to act unencumbered by the habit of multiplied terms we can perceive no more than two divisions of power of which civil government is composed namely, that of legislating or enacting laws and that of executing or administering them Everything therefore appertaining to civil government classes itself under one or other of these two divisions

So far as regards the execution of the laws that which is called the judicial power is strictly and properly the executive power of every country It is that power to which every individual has an appeal and which causes the laws to be executed neither have we

to avoid the inconsistencies, in some cases absurdities, arising from the two houses the following method has been proposed as an improvement on both

First, to have but one representation

Secondly, to divide that representation by lot into two or three parts

Thirdly, that every proposed bill shall first be debated in those parts, by succession, that they may become hearers of each other, but without taking any vote After which the whole representation to assemble for a general debate and determination by vote

To this proposed improvement has been added another for the purpose of keeping the representation in a state of constant renovation, which is that one third of the representation of each county shall go out at the expiration of one year, and the number be replaced by new elections Another third at the expiration of the second year, replaced in like manner, and every third year to be a general election[h]

But in whatever manner the separate parts of a constitution may be arranged, there is one general principle that distinguishes freedom from slavery, which is that all *hereditary government over a people is to them a species of slavery, and representative government is freedom*

The presidency in America (or, as it is sometimes called, the executive) is the only office from which a foreigner is excluded, and in England it is the only one to which he is admitted A foreigner cannot be a member of Parliament, but he may be what is called a 'king' If there is any reason for excluding foreigners, it ought to be from those offices where most mischief can be acted and where, by uniting every bias of interest and attachment, the trust is best secured

[h] As to the state of representation in England it is too absurd to be reasoned upon [illegible]

the right, and therefore to give the power where we cannot give the wisdom to use it, nor be assured of its being rightly used, renders the hazard at least equal to the precaution[8]

The objection against a single house is that it is always in a condition of committing itself too soon But it should at the same time be remembered that when there is a constitution which defines the power and establishes the principles within which a legislature shall act, there is already a more effectual check provided and more powerfully operating than any other check can be For *example*

Were a bill brought into any of the American legislatures sim*ilar to that which was passed into an act of the English Parliament,* at the commencement of the reign of George I, to extend the *duration of the assemblies to a longer period than they now sit* the check is in the constitution, which in effect says, *thus far shalt thou go and no further*

But in order to remove the objection against a single house (that of acting with too quick an impulse) and at the same time

[8] With respect to the two houses of which the English Parliament is composed they appear to be *effectually influenced into one and as a legislature to* have no temper of its own The minister whoever he at any time may be touches it as with an opium wand and it sleeps obedience

But if we look at the distinct abilities of the two houses the difference will appear so great as to show the inconsistency of placing power where there can *be no certainty of the judgment to use it Wretched as the state of representa*tion is in England it is manhood compared with what is called the House of Lords and so little is this nicknamed house regarded that the people scarcely inquire at any time what it is doing It appears also to be most under influence and the furthest removed from the general interest of the nation In the debate *on engaging in the Russian and Turkish War* the majority in the House of Peers in favor of it was upward of ninety when in the other house which was more than double its numbers the majority was sixty three

The proceedings on Mr Fox s bill[9] respecting the rights of juries merits also to be noticed The persons called the peers were not the objects of that bill They are already in possession of more privileges than that bill gave to others. They are their own jury and if anyone of that house were prosecuted for a libel he would not suffer even upon conviction for the first offense Such inequality in laws ought not to exist in any country *The French Constitution* says that *the law is the same to every individual whether to protect or to punish All are equal in its sight*

condition of being corrupted Less than a fourth part of such expense, applied as it is in America, would remedy a great part of the corruption

Another reform in the American Constitution is the exploding all oaths of personality The oath of allegiance is to the nation only The putting any individual as a figure for a nation is improper The happiness of a nation is the first object, and therefore the intention of an oath of allegiance ought not to be obscured by being figuratively taken to or in the name of any person The oath called the civic oath, in France, viz, the ' nation, the law, and the king," is improper If taken at all, it ought to be as in America, to the nation only

The law may or may not be good, but, in this place, it can have no other meaning than as being conducive to the happiness of the nation, and therefore is included in it The remainder of the oath is improper, on the ground that all person oaths ought to be abolished They are the remains of tyranny on one part and slavery on the other, and the name of the Creator ought not to be introduced to witness the degradation of his creation, or if taken, as is already mentioned, as figurative of the nation, it is in this place redundant

But whatever apology may be made for oaths at the first establishment of a government, they ought not to be permitted after ward If a government requires the support of oaths, it is a sign that it is not worth supporting and ought not to be supported Make government what it ought to be, and it will support itself

To conclude this part of the subject One of the greatest improvements that has been made for the perpetual security and progress of constitutional liberty is the provision which the new constitutions make for occasionally revising, altering and amending them

The principle upon which Mr Burke formed his political creed, that 'of binding and contr...
renounci... of time, and
now bec... forever," is
... for debate,
and, therefore, I pass it over with no other notice than exposing it.

Government is but now beginning to be known Hitherto it has

But as nations proceed in the great business of forming constitutions, they will examine with more precision into the nature and business of that department which is called the "executive" What the legislative and judicial departments are everyone can see, but with respect to what, in Europe, is called the "executive," as distinct from those two, it is either a political superfluity or a chaos of unknown things Some kind of official department, to which reports shall be made from different parts of the nation or from abroad, to be laid before the national representatives, is all that is necessary, but there is no consistency in calling this the executive, neither can it be considered in any other light than as inferior to the legislature The sovereign authority in any country is the power of making laws, and everything else is an official department

Next to the arrangement of the principles and the organization of the several parts of a constitution is the provision to be made for the support of the persons to whom the nation shall confide the administration of the constitutional powers

A nation can have no right to the time and services of any person at his own expense whom it may choose to employ or entrust in any department whatever, neither can any reason be given for making provision for the support of any one part of the government and not for the other

But, admitting that the honor of being entrusted with any part of a government is to be considered a sufficient reward, it ought to be so to every person alike If the members of the legislature of any country are to serve at their own expense that which is called the executive, whether monarchial or by any other name, ought to serve in like manner It is inconsistent to pay the one and accept the service of the other gratis

In America every department in the government is decently provided for, but no one is extravagantly paid Every member of Congress and of the state assemblies is allowed a sufficiency for his expenses Whereas in England a most prodigal provision is made for the support of one part of the government and none for the other, the consequence of which is that the one is furnished with the means of corruption and the other is put into the

would ever have been a popular toast in England or that a friendly alliance of the two nations should become the wish of either? It shows that man, were he not corrupted by governments, is naturally the friend of man and that human nature is not of itself vicious The spirit of jealousy and ferocity which the governments of the two countries inspired, and which they rendered subservient to the purpose of taxation, is now yielding to the dictates of reason interest, and humanity

The trade of courts is beginning to be understood, and the affectation of mystery, with all the artificial sorcery by which they imposed upon mankind, is on the decline It has received its death wound, and though it may linger, it will expire

Government ought to be as much open to improvement as anything which appertains to man, instead of which it has been monopolized from age to age by the most ignorant and vicious of the human race Need we any other proof of their wretched management than the excess of debt and taxes with which every nation groans and the quarrels into which they have precipitated the world?

Just emerging from such a barbarous condition, it is too soon to determine to what extent of improvement government may yet be carried For what we can foresee, all Europe may form but one great republic, and man be free of the whole

been the mere exercise of power, which forbade all effectual inquiry into rights and grounded itself wholly on possession While the enemy of liberty was its judge, the progress of its principles must have been small indeed

The constitutions of America, and also that of France, have either fixed a period for their revision or laid down the mode by which improvements shall be made

It is perhaps impossible to establish anything that combines principles with opinions and practice which the progress of circumstances, through a length of years, will not in some measure derange or render inconsistent, and therefore, to prevent inconveniences accumulating till they discourage reformations or provoke revolutions, it is best to regulate them as they occur

The rights of man are the rights of all generations of men and cannot be monopolized by any That which is worth following will be followed for the sake of its worth, and it is in this that its security lies, and not in any conditions with which it may be encumbered When a man leaves property to his heirs, he does not connect it with an obligation that they shall accept it Why, then, should we do otherwise with respect to constitutions?

The best constitution that could now be devised, consistent with the condition of the present moment, may be far short of that excellence which a few years may afford There is a morning of reason rising upon man, on the subject of government, that has not appeared before As the barbarism of the present old governments expires, the moral condition of the nations with respect to each other will be changed

Man will not be brought up with the savage idea of considering his species as enemies because the accident of birth gave the individuals existence in countries distinguished by different names, and as constitutions have always some relation to external as well as domestic circumstances, the means of benefiting by every change, foreign or domestic, should be a part of every constitution

We already see an alteration in the national disposition of England and France toward each other, which, when we look back only a few years, is itself a revolution Who could have foreseen, or who would have believed, that a French National Assembly

would ever have been a popular toast in England or that a friendly alliance of the two nations should become the wish of either?

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DISSERTATION ON FIRST PRINCIPLES OF GOVERNMENT

DISSERTATION ON FIRST PRINCIPLES OF GOVERNMENT

THERE IS NO SUBJECT more interesting to every man than the subject of government His security, be he rich or [illegible] himself acquainted with its principles and what the [illegible] to be

Every art and science, however imperfectly known at first, has been studied, improved, and brought to what we call perfection by the progressive labors of succeeding generations, but the science of government has stood still No improvement has been made in the principle and scarcely any in the practice till the American Revolution began In all the countries of Europe (except in France) the same forms and systems that were erected in the remote ages of ignorance still continue, and their antiquity is put in the place of principle it is forbidden to investigate their origin or by what right they exist If it be asked how has this happened the answer is easy they are established on a principle that is false, and they employ their power to prevent detection

Notwithstanding the mystery with which the science of government has been enveloped, for the purpose of enslaving, plundering, and imposing upon mankind, it is of all things the least mysterious and the most easy to be understood The meanest capacity cannot be at a loss if it begins its inquiries at the right point Every art and science has some point or alphabet at which the study of that art or science begins and by the assistance of which the progress is facilitated The same method ought to be observed with respect to the science of government

Instead, then, of embarrassing the subject in the outset with the numerous subdivisions under which different forms of government have been classed, such as aristocracy, democracy, oligarchy, monarchy, etc, the better method will be to begin with what

The character therefore of the revolutions of the present day distinguishes itself most definitely by grounding itself on the system of representative government, in opposition to the hereditary No other distinction reaches the whole of the principle

Having thus opened the case generally, I proceed, in the first place, to examine the hereditary system because it has the priority in point of time The representative system is the invention of the modern world, and that no doubt may arise as to my own opinion, I declare it beforehand, which is *that there is not a problem in Euclid more mathematically true than that hereditary government has not a right to exist When therefore we take from any man the exercise of hereditary power, we take away that which he never had the right to possess and which no law or custom could or ever can give him a title to*

The arguments that have hitherto been employed against the hereditary system have been chiefly founded upon the absurdity of it and its incompetence to the purpose of good government Nothing can present to our judgment or to our imagination a figure of greater absurdity than that of seeing the government of a nation fall, as it frequently does, into the hands of a lad necessarily destitute of experience and often little better than a fool It is an insult to every man of years of character, and of talents in a country

The moment we begin to reason upon the hereditary system, it falls into derision, let but a single idea begin, and a thousand will soon follow Insignificance imbecility, childhood, dotage, want of moral character—in fine, every defect, serious or laughable—unite to hold up the hereditary system as a figure of ridicule Leaving however, the ridiculousness of the thing to the reflections of the reader I proceed to the more important part of the question, namely, whether such a system has a right to exist

To be satisfied of the right of a thing to exist, we must be satisfied that it had a right to begin If it had not a right to begin, it has not the right to continue By what right, then, did the hereditary system begin? Let a man but ask himself this question, and he will find that he cannot satisfy himself with an answer

The right which any man or any family had to set itself up at

may be called primary divisions, or those under which all the several subdivisions will be comprehended

The primary divisions are but two

First, government by election and representation

Secondly, government by hereditary succession

All the several forms and systems of government, however numerous or diversified, class themselves under one or other of those primary divisions, for either they are on the system of representation or on that of hereditary succession As to that equivocal thing called "mixed government," [1] such as the late government of Holland and the present government of England, it does not make an exception to the general rule because the parts separately considered are either representative or hereditary

Beginning then our inquiries at this point, we have first to examine into the nature of those two primary divisions If they are equally right in principle, it is mere matter of opinion which we prefer If the one be demonstratively better than the other, that difference directs our choice, but if one of them should be so absolutely false as not to have a right of existence, the matter settles itself at once, because a negative proved on one thing, where two only are offered and one must be accepted, amounts to an affirmative on the other

The revolutions that are now spreading themselves in the world have their origin in this state of the case, and the present war [2] is a conflict between the representative system founded on the rights of the people and the hereditary system founded in usurpation As to what are called monarchy, royalty and aristocracy, they do not, either as things or as terms sufficiently describe the hereditary system, they are but secondary things or signs of the hereditary system and which fall of themselves if that system has not a right to exist

Were there no such terms as "monarchy," "royalty," and "aristocracy," or were other terms substituted in their place, the hereditary system, if it continued, would not be altered thereby It would be the same system under any other titulary name as it is now

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A nation, in a collective sense, comprehends all the individuals of whatever age, from just born to just dying Of these, one part will be minors and the other aged The average of life is not exactly the same in every climate and country, but in general the minority in years are the majority in numbers, that is, the number of persons under twenty-one years is greater than the number of persons above that age

This difference in number is not necessary to the establishment of the principle I mean to lay down, but it serves to show the justice of it more strongly The principle would be equally as good if the majority in years were also the majority in numbers

The rights of minors are as sacred as the rights of the aged The difference is altogether in the different age of the two parties, and nothing in the nature of the rights, the rights are the same rights and are to be preserved inviolate for the inheritance of the minors when they shall come of age During the minority of minors, their rights are under the sacred guardianship of the aged

The minor cannot surrender them, the guardian cannot dispossess him, consequently the aged part of a nation, who are the lawmakers for the *time being* and who, in the march of life, are but a few years ahead of those who are yet minors and to whom they must shortly give place have not and cannot have the right to make a law to set up and establish hereditary government, or, to speak more distinctly, *a hereditary succession of governors*, because it is an attempt to deprive every minor in the nation, at the time such a law is made, of his inheritance of rights when he shall come of age and to subjugate him to a system of government to which, during his minority, he could neither consent nor object

If a person who is a minor at the time such a law is proposed had happened to have been born a few years sooner, so as to be of the age of twenty-one years at the time of proposing it, his right to have objected against it, to have exposed the injustice and tyrannical principles of it and to have voted against it, will be admitted on all s des

If therefore, the law operates to prevent his exercising the same rights after he comes of age as he would have had a right to exercise had he been of age at the time it is undeniably a law to

first to govern a nation and to establish itself hereditarily was no other than the right which Robespierre [3] had to do the same thing in France If he had none, they had none If they had any, he had as much, for it is impossible to discover superiority of right in any family, by virtue of which hereditary government could begin The Capets, the Guelphs, the Robespierres, the Marats,[4] are all on the same standing as to the question of right It belongs exclusively to none

It is one step toward liberty to perceive that hereditary government could not begin as an exclusive right in any family The next point will be whether, having once begun, it could grow into a right by the influence of time

This would be supposing an absurdity, for either it is putting time in the place of principle or making it superior to principle, whereas time has no more connection with or influence upon principle than principle has upon time The wrong which began a thousand years ago is as much a wrong as if it began today, and the right which originates today is as much a right as if it had the sanction of a thousand years

Time with respect to principles is an eternal *now*, it has no operation upon them, it changes nothing of their nature and qualities But what have we to do with a thousand years? Our lifetime is but a short portion of that period, and if we find the wrong in existence as soon as we begin to live, that is the point of time at which it begins to us, and our right to resist it is the same as if it never existed before

As hereditary government could not begin as a natural right in any family, nor derive after its commencement any right from time, we have only to examine whether there exist in a nation a right to set it up and establish it by what is called law, as has been done in England I answer 'No, and that any law or any *constitution made for that purpose* is an act of treason against the right of every minor in the nation at the time it is made and against the rights of all succeeding generations

I shall speak upon each of those cases First, of the minor at the time such law is made Secondly, of the generations that are to follow

For example if France at this or any other moment contains twenty four millions of souls, twelve millions will be males and twelve females Of the twelve millions of males, six millions will be of the age of twenty-one years and six will be under, and the authority to govern will reside in the first six.

But every day will make some alteration, and in twenty-one years every one of those minors who survives will have arrived at age and the greater part of the former stock will be gone, the majority of persons then living in whom the legal authority resides will be composed of those who, twenty-one years before, had no legal existence Those will be fathers and grandfathers in their turn and in the next twenty-one years (or less), another race of minors arrived at age will succeed them and so on

As this is ever the case, and as every generation is equal in rights to another, it consequently follows that there cannot be a right in any to establish government by hereditary succession, because it would be supposing itself possessed of a right superior to the rest, namely, that of commanding by its own authority how the world shall be hereafter governed and who shall govern it

Every age and generation is and must be (as a matter of right) as free to act for itself in all cases as the age and generation that preceded it. The vanity and presumption of governing beyond the grave is the most ridiculous and insolent of all tyrannies Man has no property in man neither has one generation a property in the generations that are to follow

In the first part of the *Rights of Man* I have spoken of government by hereditary succession and I will here close the subject with an extract from that work which states it under the two following heads *

The history of the English Parliament furnishes an example of this kind and which merits to be recorded as being the greatest instance of legislative ignorance and want of principle that is to be found in any country The case is as follows

* [The quotation from *Rights of Man* omitted from this text of the "Dissertation" appears on pages 102 104 of the present work. The passage begins "*First* the right of a particular family and closes (with some necessary differences in phrasing) "good Lord deliver the world."]

take away and annul the rights of every person in the nation who shall be a minor at the time of making such a law, and con sequently the right to make it cannot exist

I come now to speak of government by hereditary succession, as it applies to succeeding generations, and to show that in this case, as in the case of minors, there does not exist in a nation a right to set it up

A nation, though continually existing, is continually in a state of renewal and succession It is never stationary Every day pro duces new births, carries minors forward to maturity and old persons from the stage In this ever running flood of generations there is no part superior in authority to another Could we con ceive an idea of superiority in any, at what point of time, or in what century of the world, are we to fix it? To what cause are we to ascribe it? By what evidence are we to prove it? By what criterion are we to know it?

A single reflection will teach us that our ancestors, like ourselves, *were but tenants for life in the great freehold of rights* The fee absolute was not in them, it is not in us it belongs to the whole family of man through all ages If we think otherwise than this, we think either as slaves or as tyrants As slaves, if we think that any former generation had a right to bind us, as tyrants, if we think that we have authority to bind the generations that are to follow

It may not be inapplicable to the subject to endeavor to define what is to be understood by a "generation" in the sense the word is here used

As a natural term, its meaning is sufficiently clear The father, the son, the grandson are so many distinct generations But when we speak of a generation as describing the persons in whom legal authority resides, as distinct from another generation of the same description who are to succeed them it comprehends all those who are above the age of twenty one years at the time that we count from, and a generation of this kind will continue in authority between fourteen and twenty-one years, that is until the number of minors, who shall have arrived at age, shall be greater than the number of persons remaining of the former stock

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In the first part of the *Rights of Man* I have spoken of government by hereditary succession and I will here close the subject with an extract from that work, which states it under the two following heads*

The history of the English Parliament furnishes an example of this kind, and which merits to be recorded as being the greatest instance of legislative ignorance and want of principle that is to be found in any country The case is as follows

* [The quotation from *Rights of Man* omitted from this text of the "Dissertation" appears on pages 102 104 of the present work. The passage begins "First the right of a particular family " and closes (with some necessary differences in phrasing) "good Lord deliver the world."]

The English Parliament of 1688 imported a man and his wife from Holland, *William* and *Mary*, and made them King and Queen of England Having done this, the said Parliament made a law to convey the government of the country to the heirs of William and Mary, in the following words "We, the Lords Spiritual and Temporal, and Commons, do, in the name of the people of England, most humbly and faithfully submit *ourselves, our heirs and posterities,* to William and Mary, *their heirs and posterities,* forever" And in a subsequent law, as quoted by Edmund Burke, the said Parliament, in the name of the people of England then living, *binds the said people, their heirs and posterities, to William and Mary, their heirs and posterities, to the end of time*

It is not sufficient that we laugh at the ignorance of such law makers, it is necessary that we reprobate their want of principle The Constituent Assembly of France, 1789, fell into the same vice as the Parliament of England had done, and assumed to establish a hereditary succession in the family of the Capets as an act of the constitution of that year

That every nation, *for the time being,* has a right to govern itself as it pleases must always be admitted but government by hereditary succession is government for another race of people, and not for itself, and as those on whom it is to operate are not yet in existence, or are minors, so neither is the right in existence to set it up for them, and to assume such a right is treason against the right of posterity

I here close the arguments on the first head, that of government by hereditary succession, and proceed to the second, that of government by election and representation, or as it may be concisely expressed *representative government,* in contradistinction to *hereditary government*

Reasoning by exclusion, if *hereditary government* has not a right to exist, and that it has not is provable, *representative government* is admitted of course

In contemplating government by election and representation we amuse not ourselves in inquiring when or how, or by what right, it began Its origin is ever in view Man is himself the origin

and the evidence of the right It appertains to him in right of his existence, and his person is the title deed

The true and only true basis of representative government is equality of rights Every man has a right to one vote and no more in the choice of representatives The rich have no more right to exclude the poor from the right of voting or of electing and being elected than the poor have to exclude the rich and wherever it is attempted or proposed on either side it is a question of force and not of right Who is he that would exclude another? That other has a right to exclude him

That which is now called aristocracy implies an inequality of rights, but who are the persons that have a right to establish this inequality? Will the rich exclude themselves? No Will the poor exclude themselves? No By what right then can any be excluded? It would be a question if any man or class of men have a right to exclude themselves but be this as it may, they cannot have the right to exclude another The poor will not delegate such a right to the rich nor the rich to the poor, and to assume it is not only to assume arbitrary power but to assume a right to commit robbery

Personal rights of which the right of voting for representatives is one are a species of property of the most sacred kind, and he that would employ his pecuniary property or presume upon the influence it gives him to dispossess or rob another of his property or rights uses that pecuniary property as he would use firearms and merits to have it taken from him

Inequality of rights is created by a combination in one part of the community to exclude another part from its rights Whenever it be made an article of a constitution or a law that the right of voting or of electing and being elected shall appertain exclusively to persons possessing a certain quantity of property, be it little or much it is a combination of the persons possessing that quantity to exclude those who do not possess the same quantity It is investing *themselves* with powers as a self-created part of society, to the exclusion of the rest

It is always to be taken for granted that those who oppose an

equality of rights never mean the exclusion should take place on themselves, and in this view of the case, pardoning the vanity of the thing, aristocracy is a subject of laughter This self soothing vanity is encouraged by another idea not less selfish, which is that the opposers conceive they are playing a safe game, in which there *is a chance to gain and none to lose*, that, at any rate, the doctrine of equality includes them and that, if they cannot get more rights than those whom they oppose and would exclude, they shall not have less

This opinion has already been fatal to thousands who, not contented *with equal rights*, have sought more till they lost all, and experienced in themselves the degrading *inequality* they endeavored to fix upon others

In any view of the case, it is dangerous and impolitic, sometimes ridiculous and always unjust, to make property the criterion of *the right of voting If the sum or value of the property upon which* the right is to take place be considerable it will exclude a majority of the people and unite them in a common interest against the government and against those who support it, and as the power is always with the majority, they can overturn such a government *and its supporters whenever they please*

If, in order to avoid this danger, a small quantity of property be fixed as the criterion of the right, it exhibits liberty in disgrace by putting it in competition with accident and insignificance When a broodmare shall fortunately produce a foal or a mule that, by being worth the sum in question shall convey to its owner the right of voting or by its death take it from him in whom does the origin of such a right exist? Is it in the man or in the mule? When *we consider how many ways property may be acquired without* merit and lost without crime we ought to spurn the idea of making it a criterion of rights

But the offensive part of the case is that this exclusion from the right of voting implies a stigma on the moral character of the *persons excluded*, and this is what no part of the community has a right to pronounce upon another part No external circumstance can justify it, wealth is no proof of moral character, nor poverty of the want of it

On the contrary, wealth is often the presumptive evidence of dishonesty and poverty the negative evidence of innocence If therefore property, whether little or much, be made a criterion, the means by which that property has been acquired ought to be made a criterion also

The only ground upon which exclusion from the right of voting is consistent with justice would be to inflict it as a punishment for a certain time upon those who should propose to take away that right from others The right of voting for representatives is the primary right by which other rights are protected

To take away this right is to reduce a man to slavery, for slavery consists in being subject to the will of another, and he that has not a vote in the election of representatives is in this case The proposal, therefore, to disfranchise any class of men is as criminal as the proposal to take away property

When we speak of right we ought always to unite with it the idea of duties rights become duties by reciprocity The right which I enjoy becomes my duty to guarantee it to another, and he to me and those who violate the duty justly incur a forfeiture of the right

In a political view of the case, the strength and permanent security of government is in proportion to the number of people interested in supporting it The true policy therefore, is to interest the whole by an equality of rights for the danger arises from exclusions It is possible to exclude men from the right of voting, but it is impossible to exclude them from the right of rebelling against that exclusion, and when all other rights are taken away the right of rebellion is made perfect

While men could be persuaded they had no rights or that rights appertained only to a certain class of men or that government was a thing existing in right of itself it was not difficult to govern them authoritatively The ignorance in which they were held and the superstition in which they were instructed furnished the means of doing it

But when the ignorance is gone and the superstition with it, when they perceive the imposition that has been acted upon them, when they reflect that the cultivator and the manufacturer are the

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primary means of all the wealth that exists in the world beyond what nature spontaneously produces, when they begin to feel their consequences by their usefulness and their right as members of society, it is then no longer possible to govern them as before The fraud once detected cannot be reacted To attempt it is to provoke derision or invite destruction

That property will ever be unequal is certain Industry, superiority of talents, dexterity of management, extreme frugality, fortunate opportunities or the opposite, or the means of those things, will ever produce that effect, without having recourse to the harsh, ill-sounding names of avarice and oppression, and besides this there are some men who, though they do not despise wealth, will not stoop to the drudgery or the means of acquiring it nor will be troubled with it beyond their wants or their independence, while in others there is an avidity to obtain it by every means not punishable—it makes the sole business of their lives, and they follow it as a religion All that is required with respect to property is to obtain it honestly and not employ it criminally, but it is always criminally employed when it is made a criterion for exclusive rights

In institutions that are purely pecuniary, such as that of a bank or a commercial company, the rights of the members composing that company are wholly created by the property they invest therein, and no other rights are represented in the government of that company than what arise out of that property, neither has that government cognizance of *anything but property*

But the case is totally different with respect to the institution of civil government, organized on the system of representation Such a government has cognizance of *everything* and of *every man* as a member of the national society, whether he has property or not, and therefore the principle requires that *every man* and *every kind of right* be represented, of which the right to acquire and to hold property is but one, and that not of the most essential kind

The protection of a man's person is more sacred than the protection of property, and besides this the faculty of performing any kind of work or services by which he acquires a livelihood or maintaining his family is of the nature of property It is property

to him he has acquired it, and it is as much the object of his protection as exterior property, possessed without that faculty, can be the object of protection in another person

I have always believed that the best security for property, be it much or little, is to remove from every part of the community, as far as can possibly be done, every cause of complaint and every motive to violence, and this can only be done by an equality of rights When rights are secure property is secure in consequence But when property is made a pretense for unequal or exclusive rights it weakens the right to hold the property, and provokes indignation and tumult, for it is unnatural to believe that property can be secure under the guarantee of a society injured in its rights by the influence of that property

Next to the injustice and ill policy of making property a pretense for exclusive right is the unaccountable absurdity of giving to mere *sound* the idea of property and annexing to it certain rights for what else is a *title* but sound? Nature is often giving to the world some extraordinary men who arrive at fame by merit and universal consent, such as Aristotle Socrates, Plato, etc They were truly great or noble But when government sets up a manufactory of nobles it is as absurd as if she undertook to manufacture wise men Her nobles are all counterfeits

This wax work order has assumed the name of aristocracy and the disgrace of it would be lessened if it could be considered only as childish imbecility We pardon foppery because of its insignificance and on the same ground we might pardon the foppery of titles. But the origin of aristocracy was worse than foppery It was robbery The first aristocrats in all countries were brigands Those of later times sycophants

It is very well known that in England (and the same will be found in other countries) the great landed estates now held in descent were plundered from the quiet inhabitants at the Conquest The *possibility* did not exist of acquiring such estates honestly If it be asked how they could have been acquired, no answer but that of robbery can be given That they were not acquired by *trade*, by commerce, by manufactures, by agriculture, or by any *reputable* employment is certain

primary means of all the wealth that exists in the world beyond what nature spontaneously produces, when they begin to feel their consequences by their usefulness and their right as members of society, it is then no longer possible to govern them as before The fraud once detected cannot be reacted To attempt it is to provoke derision or invite destruction

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The protection of a man's person is more sacred than the protection of property, and besides this the faculty of performing any kind of work or services by which he acquires a livelihood or maintaining his family is of the nature of property *It is property*

followed by a detail of what the rights are, for every civil right has a natural right for its foundation and it includes the principle of a reciprocal guarantee of those rights from man to man. As, therefore it is impossible to discover any origin of rights otherwise than in the origin of man it consequently follows that rights appertain to man in right of his existence only and must therefore be equal to every man

The principle of an *equality of rights* is clear and simple Every man can understand it and it is by understanding his rights that he learns his duties for where the rights of men are equal, every man must finally see the necessity of protecting the rights of others as the most effectual security for his own

But if in the formation of a constitution we depart from the principle of equal rights or attempt any modification of it, we plunge into a labyrinth of difficulties from which there is no way out but by retreating Where are we to stop? Or by what principle are we to find out the point to stop at that shall discriminate between men of the same country part of whom shall be free and the rest not?

If property is to be made the criterion it is a total departure from every moral principle of liberty because it is attaching rights to mere matter and making man the agent of that matter It is moreover holding up property as an apple of discord and not only exciting but justifying war against it for I maintain the principle that when property is used as an instrument to take away the rights of those who may happen not to possess property it is used to an unlawful purpose as firearms would be in a similar case

In a state of nature all men are equal in rights but they are not equal in power the weak cannot protect themselves against the strong This being the case the institution of civil society is for the purpose of making an equalization of powers that shall be parallel to and a guarantee of the equality of rights The laws of a country when properly constructed apply to this purpose

Every man takes the arm of the law for his protection as more effectual than his own and therefore every man has an equal right in the formation of the government and of the laws by which he is to be governed and judged In extensive countries and societies

How then were they acquired? Blush, aristocracy, to hear your origin, for your progenitors were thieves They were the Robespierres and the Jacobins of that day When they had committed the robbery, they endeavored to lose the disgrace of it by sinking their real names under fictitious ones, which they called titles It is ever the practice of felons to act in this manner They never pass by their real names

As property, honestly obtained, is best secured by an equality of rights, so ill gotten property depends for protection on a monopoly of rights He who has robbed another of his property will next endeavor to disarm him of his rights to secure that property, for when the robber becomes the legislator, he believes himself secure That part of the government of England that is called the House of Lords was originally composed of persons who had committed the robberies of which I have been speaking It was an association for the protection of the property they had stolen

But besides the criminality of the origin of aristocracy, it has an injurious effect on the moral and physical character of man Like slavery, it debilitates the human faculties, for as the mind bowed down by slavery loses in silence its elastic powers, so, in the contrary extreme, when it is buoyed up by folly it becomes incapable of exerting them and dwindles into imbecility It is impossible that a mind employed upon ribands and titles can ever be great The childishness of the objects consumes the man

It is at all times necessary, and more particularly so during the progress of a revolution and until right ideas confirm themselves by habit, that we frequently refresh our patriotism by reference to first principles It is by tracing things to their origin that we learn to understand them, and it is by keeping that line and that origin always in view that we never forget them

An inquiry into the origin of rights will demonstrate to us that *rights* are not *gifts* from one man to another, nor from one class of men to another, *for who is he who could be the first giver, or by what principle or on what authority could he possess the right of giving?*

A declaration of rights is not a creation of them nor a donation of them It is a manifest of the principle by which they exist,

In all matters of opinion, the social compact, or the principle by which society is held together, requires that the majority of opinions becomes the rule for the whole and that the minority yields practical obedience thereto This is perfectly conformable to the principle of equal rights, for, in the first place, every man has *a right to give an opinion*, but no man has a right that his opinion should *govern the rest* In the second place, it is not supposed to be known beforehand on which side of any question, whether for or against, any man's opinion will fall He may happen to be in a majority upon some questions and in a minority upon others, and by the same rule that he expects obedience in the one case he must yield it in the other

All the disorders that have arisen in France during the progress of the Revolution have had their origin, not in the *principle of equal rights*, but in the violation of that principle The principle of equal rights has been repeatedly violated and that not by the majority but by the minority, and *that minority has been composed of men possessing property, as well as of men without property, property, therefore, even upon the experience already had, is no more a criterion of character than it is of rights*

It will sometimes happen that the minority are right and the majority are wrong but as soon as experience proves this to be the case the minority will increase to a majority, and the error will reform itself by the tranquil operation of freedom of opinion and equality of rights Nothing therefore can justify an insurrection, neither can it ever be necessary where rights are equal and opinions free

Taking then the principle of equal rights as the foundation of the Revolution and consequently of the constitution, the organical part, or the manner in which the several parts of the government shall be arranged in the constitution, will, as is already said, fall within the province of opinion

Various methods will present themselves upon a question of this kind and though experience is yet wanting to determine which is the best it has I think sufficiently decided which is the worst That is the worst which in its deliberations and decisions, is subject to the precipitance and passion of an individual, and when

such as America and France this right in the individual can only be exercised by delegation that is by election and representation and hence it is that the institution of representative government arises

Hitherto I have confined myself to matters of principle only First that hereditary government has not a right to exist that it cannot be established on any principle of right and that it is a violation of all principle Secondly that government by election and representation has its origin in the natural and eternal rights of man for whether a man be his own lawgiver as he would be in a state of nature or whether he exercises his portion of legislative sovereignty in his own person as might be the case in small democracies where all could assemble for the formation of the laws by which they were to be governed or whether he exercises it in the choice of persons to represent him in a national assembly of representatives the origin of the right is the same in all cases The first as is before observed is defective in power the second is practicable only in democracies of small extent the third is the greatest scale upon which human government can be instituted

Next to matters of *principle* are matters of *opinion* and it is necessary to distinguish between the two Whether the rights of men shall be equal is not a matter of opinion but of right and consequently of principle for men do not hold their rights as grants from each other but each one in right of himself Society is the guardian but not the giver And as in extensive societies such as America and France the right of the individual in matters of government cannot be exercised but by election and representation it consequently follows that the only system of government consistent with principle where simple democracy is impracticable is the representative system

But as to the organical part or the manner in which the several parts of government *shall* be arranged and composed *it is altogether matter of opinion* It is necessary that all the parts be conformable with the *principle of equal rights* and so long as this principle be religiously adhered to no very material error can take place neither can any error continue long in that part which falls within the province of opinion

cute the laws, of which that which is called the "judiciary" is the chief

But mankind have conceived an idea that *some kind of authority* is necessary to *superintend* the execution of the laws and to see that they are faithfully performed, and it is by confounding this superintending authority with the official execution that we get embarrassed about the term 'executive power " All the parts in the governments of the United States of America that are called the "executive' are no other than authorities to superintend the execution of the laws and they are so far independent of the legislative that they know the legislative only through the laws and cannot be controlled or directed by it through any other medium

In what manner this superintending authority shall be appointed or composed is a matter that falls within the province of opinion Some may prefer one method and some another and in all cases where opinion only and not principle is concerned the majority of opinions forms the rule for all

There are however some things deducible from reason and evidenced by experience that serve to guide our decision upon the case The one is never to invest any individual with extraordinary power for besides his being tempted to misuse it, it will excite contention and commotion in the nation for the office Secondly, never to invest power long in the hands of any number of individuals The inconveniences that may be supposed to accompany frequent changes are less to be feared than the danger that arises from long continuance

I shall conclude this discourse with offering some observations on the means of *preserving liberty* for it is not only necessary that we establish it but that we preserve it

It is in the first place necessary that we distinguish between the means made use of to overthrow despotism in order to prepare the way for the establishment of liberty, and the means to be used after the despotism is overthrown

The means made use of in the first case are justified by necessity Those means are, in general insurrections, for while the established government of despotism continues in any country, it is scarcely possible that any other means can be used *It is also*

the whole legislature is crowded into one body, it is an individual in mass In all cases of deliberation, it is necessary to have a corps of reserve, and it would be better to divide the representation by lot into two parts, and let them revise and correct each other, than that the whole should sit together and debate at once

Representative government is not necessarily confined to any one particular form The principle is the same in all the forms under which it can be arranged The equal rights of the people is the root from which the whole springs, and the branches may be *arranged as present opinion or future experience shall best direct* As to that *hospital of incurables* (as Chesterfield[5] calls it), the British House of Peers, it is an excrescence growing out of corruption, and there is no more affinity or resemblance between any of the branches of a legislative body originating from the right of the *people and the aforesaid House of Peers than between a regular* member of the human body and an ulcerated wen

As to that part of government that is called the "executive,' it is necessary in the first place to fix a precise meaning to the word

There are but two divisions into which power can be arranged *First, that of willing or decreeing the laws, secondly, that of executing* or putting them in practice The former corresponds to the intellectual faculties of the human mind, which reasons and determines what shall be done the second, to the mechanical powers of the human body that puts that determination into practice

If the former decides and the latter does not perform, it is a state of imbecility, and if the latter acts without the predetermination of the former, it is a state of lunacy The executive department therefore is official and is subordinate to the legislative, as the body is to the mind in a state of health for it is impossible to conceive *the idea of two sovereignties a sovereignty to will and a sovereignty to act*

The executive is not invested with the power of deliberating whether it shall act or not it has no discretionary authority in the case, for it can *act no other thing* than what the laws decree and it is *obliged to act conformably thereto and in this view of the case* the executive is made up of all the official departments that exe

NOTES

COMMON SENSE

[1] Charles I, who became King of England in 1625 was condemned as a traitor and enemy of the nation and was beheaded in 1649

[2] The words of Jesus as reported in Matthew 22 21 Tory politicians and pamphleteers of the period frequently used this injunction as Biblical authority for the submission of the individual to the state

[3] Gideon delivered the Israelites from the Midianites, as described in Judges 6 1 27 8 1 23

[4] Samuel s yielding to the people s clamor for a king is related in I Samuel 8

[5] William I King of England was the illegitimate son of Robert "Le Diable Duke of Normandy He invaded England in 1066 and acquired the throne as a result of his victory in the battle of Hastings

[6] York and Lancaster were the two noble families whose rivalry for the throne of England brought on the Wars of the Roses, so called because the emblem of the House of York was a white rose and that of Lancaster a red rose The contesting monarchs mentioned in this paragraph are Henry VI (reigned 1422 1461) and Edward IV (reigned 1461 1483)

[7] Henry VII reigned from 1485 to 1509

[8] Sir William Meredith who died in 1790 was a lord of the admiralty under Rockingham s first ministry (1765) He was also the author of several political works

[9] This reference is too vague for positive identification Paine probably has in mind one of two brothers Henry Pelham (1695? 1754) or Thomas Pelham Holles (1693 1768) both of whom, at various times held ministerial positions in the English government. See *Dictionary of National Biography*

[10] On April 19 1775 the battles of Lexington and Concord were fought. These battles marked the opening hostilities of the American Revolution

certain that, in the commencement of a revolution the revolutionary party permit to themselves a *discretionary exercise of power* regulated more by circumstances than by principle, which, were the practice to continue, liberty would never be established, or if established would soon be overthrown It is never to be expected in a revolution that every man is to change his opinion at the same moment

There *never yet was any truth or any principle so irresistibly* obvious that all men believed it at once Time and reason must cooperate with each other to the final establishment of any principle, and therefore those who may happen to be first convinced have not a right to persecute others on whom conviction operates more slowly The moral principle of revolutions is to instruct, not to destroy

Had a constitution been established two years ago (as ought to have been done), the violences that have since desolated France and injured the character of the Revolution would, in my opinion, have been prevented The nation would then have had a bond of union, and every individual would have known the line of conduct he was to follow But instead of this, a revolutionary government, a thing without either principle or authority, was substituted in its place, virtue and crime depended upon accident, and that which was patriotism one day became treason the next

All these things have followed from the want of a constitution for it is the nature and intention of a constitution to *prevent governing by party* by establishing a common principle that shall limit and control the power and impulse of party and that says to all parties *thus far shalt thou go and no further* But in the absence of a constitution men look entirely to party and instead of principle governing party party governs principle

An avidity to punish is always dangerous to liberty It leads men to stretch, to misinterpret and to misapply even the best of laws He that would make his own liberty secure must guard even his enemy from oppression for if he violates this duty he establishes a precedent that will reach to himself

THOMAS PAINE

Paris, July, 1795

[20] John Entick, *A New Naval History, or, Compleat View of the British Marine* London 1757 ' Introduction," page lvi

[21] Josiah Burchett (1666? 1746) was at an early age taken into the naval office by Samuel Pepys Throughout much of his life Burchett was connected with English naval affairs, serving from 1698 to 1742 as secretary of the admiralty

[22] Paine here refers to the French and Indian War (1756-1763), which resulted from the territorial rivalry between England and France

[23] Philadelphia is located on the Delaware River

[24] Charles W Cornwall (1735 1789) held the office of a lord of the treasury from 1774 to 1780 in the government of North

[25] The King s speech addressed to Parliament may be found in the *Pennsylvania Gazette* for Jan 10 1776 The King here averred that he was anxious to prevent, if it had been possible the effusion of the blood of my subjects and the calamities which are inseparable from a state of war, still hoping that my people in America would have discerned the traitorous views of the leader and have been convinced that to be a subject of Great Britain with all its consequences is to be the freest member of any civil society in the known world The rebellious war now levied is become more general manifestly carried on for the pu[illegible] empire I need not dwell upon [illegible] a plan It is now becom[illegible] effects) of clemency [illegible] most decisive exert[illegible] establishment and [illegible] forces but in such a manner as may be the least burthensome to my kingdoms I have also the satisfaction to inform you that I have received the most friendly offers of foreign assistance

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[27] Charles Watson Wentworth [illegible] (1730-1782) [illegible] In [illegible] Ameri car [illegible] the Stamp Act was repealed In [illegible] Lord North as prime minister, but died within three months after taking office

[11] The reference is to the Seven Years' War, carried on from 1756 to 1763 by Frederick II of Prussia against Austria, Russia, and France. During this war Hanover suffered materially from the ravages of the French.

[12] As a result of the destruction by the inhabitants of Boston of large quantities of tea sent from England (an event known as the "Boston Tea Party"), the English government passed in 1774 a series of acts greatly curtailing the freedom of the colony and causing much hardship.

[13] A quotation from *Paradise Lost*, iv. 98-99.

[14] In 1765 the British Parliament passed a Stamp Act, which required that all American newspapers, pamphlets, legal documents, etc., bear a revenue stamp. This act, which greatly angered the American colonies, was repealed the following year.

[15] Lord Frederick North was the British prime minister throughout most of the American Revolution. Many Americans naturally felt that the removal of North, who was a tool of the King, might alleviate the oppression which the colonists were suffering at the hand of the British government.

[16] The battle of Bunker Hill, fought in Boston on June 17, 1775, resulted in a victory for the British.

[17] George III, who reigned from 1760 to 1820.

[18] The Magna Charta, or Great Charter, was granted by King John of England in 1215 to the barons. This famous document is usually regarded as the basis of English liberties.

[19] *Giacinto (Hyacinthe)*, Marquis de Dragonetti, was born in [illegible]

work was written in opposition to the celebrated work of Beccaria on the reform of the penal system, *Trattato dei delitti e delle pene* [illegible]

[20] John Entick *A New Naval History or Compleat View of the British Marine* London 1757 Introduction page lvi

[21] Josiah Burchett (1666? 1746) was at an early age taken into the naval office by Samuel Pepys Throughout much of his life Burchett was connected with English naval affairs, serving from 1698 to 1742 as secretary of the admiralty

[22] Paine here refers to the French and Indian War (1756-1763) which resulted from the territorial rivalry between England and France

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[27] Charles Watson Wentworth second Marquis of Rockingham (1730-1782) was lord of the treasury and prime minister 1765 66 In politics he was a Whig and favored independence for the American Colonies Under his administration the Stamp Act was repealed In 1782 he succeeded Lord North as prime minister but died within three months after taking office

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[19] Giacinto (Hyacinthe), Marquis de Dragonetti, was born in Lower Abruzzia in 1738 After entering the legal profession, he was named to a chair of public law at the University of Naples In recognition of his legal talents, he was at various times a member of the Sicilian

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[30] The American Tories were the political party that remained loyal to the Crown and opposed the independence of the Colonies, whereas the Whigs desired greater independence from England—home rule or even complete separation from the British Commonwealth Although the names were borrowed from the two major political parties of England, the political division which they signified in America differed from that in England The Tory party in England was the successor of the Court party and upheld the prerogative of the Crown over Parliament, while the Whigs defended the sovereignty of Parliament The English Tories were mostly titled landowners and, as to their religious affiliation, Episcopalians The Whigs drew their strength from the urban elements, especially the merchants, and from the small landowners They were Puritans, either Presbyterians or Independents

[31] Reference here is probably to a budget of news from England which appeared on December 11, 1775, in the *New-York Gazette and the* [illegible] through [illegible] reads " [illegible] try and America for the future government and tranquility of the latter country, is now under the consideration of the cabinet The general object of the proposed regulation is *to put the Americans on the same footing of freedom, and under the same advantages, with the rest of his Majesty's subjects* The whole continent is to be divided into large districts, each of which is to send a representative to the British Parliament The number of the representa- [illegible] the revenue that is [illegible] their number [illegible] alling this plan [illegible] the unity of the [illegible] and representa- [illegible]

[32] The date "1763' marked the close of the French and Indian War, which for seven years had drained the resources of the colonies In the light of the passage of the notorious Stamp Act two years

later, the Americans looked back upon this date as marking the beginning of a period of relative freedom from British oppression

THE AMERICAN CRISIS: I

[1] Paine is here quoting loosely from the Declaratory Act passed [illegible]

[2] Late in 1775 and early in 1776 numerous clashes took place in the Jerseys (now called New Jersey) between the Tories and the [illegible]

[illegible] mander-in-chief of the British forces in America from 1775 to 1778

[3] Fort Lee is located on the Jersey side of the Hudson River approximately opposite what is now 125th Street, New York City

[4] The North River is now more often called the Hudson

[5] Nathanael Greene [illegible]

[6] François Arouet, called Voltaire (1694-1778), the French poet, historian, and philosopher

[illegible]

be p[illegible] and truth in my days

[9] Cf James 2 18 "Yea, a man may say, Thou hast faith, and I have works show me thy faith without thy works, and I will show thee my faith by my works"

[10] Thomas Gage was commander-in-chief of the British forces in America from 1763 to 1775

[11] Cf Philippians 4 7 "And the peace of God, which passeth all understanding, shall keep your hearts and minds through Christ Jesus"

[28] Paine here refers again to the French and Indian War (1756 1763)

[29] Paine here refers to the Quebec Act passed by the British Parliament in 1774 One of the provisions of this act placed the territory northwest of the Ohio under the control of Quebec

[30] The American Tories were the political party that remained loyal to the Crown and opposed the independence of the Colonies, whereas the Whigs desired greater independence from England—home rule or even complete separation from the British Commonwealth Although the names were borrowed from the two major political parties of England, the political division which they signified in America differed from that in England The Tory party in England was the successor of the Court party and upheld the prerogative of the Crown over Parliament, while the Whigs defended the sovereignty of Parliament The English Tories were mostly titled landowners and, as to their religious affiliation, Episcopalians The Whigs drew their strength from the urban elements, especially the merchants, and from the small landowners They were Puritans, either Presbyterians or Independents

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the internal peace and security of these kingdoms, and to require, in the most urgent manner, the immediate and vigilant attention of [illegible] Committee of Secrecy of [illegible] (London, 1794).

[2] [illegible] English throne.

[3] [illegible]

[4] The Marquis de Lafayette (1757-1834), whose memory all [illegible] Washington [illegible]

[6] Smithfield is the name of a once celebrated cattle market in London It was here that numerous Protestant martyrs met their death from 1400 to 1558

[7] The term "Dissenter" as here used [illegible] in the seventeenth century, asserted the source of religious authority to lie in the "inner voice," or the voice of God speaking directly to the individual without mediation of church or creed

[8] The Edict of Nantes [illegible] 1685

[9] [illegible]

[12] "Hessians" was the name applied to the German mercenary soldiers which the British hired during the American Revolution

[13] The [illegible] *sylvania* [illegible] close of [illegible]

THE AMERICAN CRISIS XIII

[1] Paine was not always scrupulously accurate in his statements of fact From 1777 to 1779 he had been secretary of the Congressional committee on foreign affairs He was also for a brief period clerk of the *Pennsylvania Assembly*

[2] On April 19, 1783, the eighth anniversary of the battles of Lexington and Concord, Washington issued a proclamation announcing the end of the war and the discharge of the armies

RIGHTS OF MAN PART ONE

[1] Dr Richard Price (1723-1791) was a dissenting clergyman of England, who published in 1776 a brilliant defense of America, followed [illegible] *to is e* [illegible] *Nov* [illegible] *for the Commemorating the Revolution in Great Britain* (London 1790) The three 'fundamental rights are stated on pp 28 29

[2] The purpose of the Revolution Society was to commemorate the English revolution of 1688 and to preserve and disseminate the principles of Civil and Religious Liberty' See *An Abstract of the History and Proceedings of the Revolution Society in London* (London, 1789) The Society sent to the French National Assembly a congratulatory address which aroused the indignation of Burke See *Correspondence of the Revolution Society in London, with the National Assembly, and with Various Societies of the Friends of Liberty in France and England* (London, 1792)

The aim of the Society for Constitutional Information was 'to revive in the minds of their fellow citizens THE COMMONALTY AT LARGE, a knowledge of their lost Rights ' See *An Address to the* [illegible] *the Society for Constitutional Information* (London, [illegible] an investigation of the [illegible] The result of the investigation revealed, it was affirmed that the activities of these organizations appear to become every day more and more likely to affect

party over the republicans, whereby in 1747 William IV became stadtholder of the Seven United Provinces (Netherlands)

[4] Paine here expresses himself inaccurately The President is not

[5]

of the city council After 1750, when he was elected a delegate to the Pennsylvania Assembly, he was increasingly involved in state and colonial politics He was a signer of the Declaration in 1776, and later in the same

New York, 1952)

[6] Paine is here referring to

English throne in 1714

[7] That is, nine out of the original thirteen states

[8] Paine here refers

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DISSERTATION ON FIRST PRINCIPLES OF GOVERNMENT

[1]

... such as in England and Holland

[2] Paine is probably referring here to the general uprising of the Poles in 1794 under the leadership of General Thaddeus Kosciusko

in John Quincy Adams' *Oration on the Life and Character of Gilbert Motier de Lafayette* (Washington, 1835), p 39 "May this immense Temple of Freedom ever stand, a lesson to oppressors, an example to the oppressed, a sanctuary for the rights of mankind!"

[10] Henry IV, King of France (reigned 1589 1610), who was responsible for the Edict of Nantes, did much to improve economic conditions in France and was an idol of the lower classes (See also note 8)

RIGHTS OF MAN PART TWO

[1] In 1778 certain Catholic disabilities in England were removed by act of Parliament Lord George Gordon as president of the Protestant Association sought in 1780 a repeal of this act Gordon's cause was soon taken up by the masses, and riots ensued involving the destruction of many Catholic churches, as well as the burning of Newgate prison

[2] The Abbe Emmanuel Joseph Sieyès (1748 1836) played an active part in the early stages of the French Revolution, although he advocated the retention of the monarchy In the issue of the *Gazette nationale, ou le Moniteur universal* for July 6 1791, Sieyès (who signs himself 'Emm Syeyes") defends the institution of monarchy thus

Ce n est ni pour caresser d anciennes habitudes ni par aucun sentiment superstitieux de royalisme que je préfère la monarchie Je la préfère parce qu il m est demontre qu il y a plus de liberté pour le citoyen dans la monarchie que dans la république

He later presents a challenge 'J'entrerai en lice avec les républicains de bonne foi

In a ' Lettre de M Thomas [illegible] Paris le 8 juillet 1791, which appe[illegible] *nationale* for July 16 Paine [illegible] Sieyès and to defend a republican form of government against the [illegible] Foner II [illegible] ection of [illegible] m Sieyes [illegible] *ionale* for [illegible] e French author

[3] In using the date 1715 Paine has in mind the Treaty of Utrecht (actually signed in 1713) which brought to a close the war of the Spanish succession

The date "1745 probably refers to the victory of the Orange

party over the republicans, whereby in 1747 William IV became stadtholder of the Seven United Provinces (Netherlands)

[4] Paine here expresses himself inaccurately. The President is not a member of Congress In the light of the following sentence, Paine apparently means that the President possesses extraordinary executive power, which cannot be entrusted to an immature mind, as is sometimes the case with a king in a hereditary monarchy

[5] Born in Boston in 1706, Benjamin Franklin went to Philadel

Pennsylvania Assembly, he was increasingly involved in state and colonial politics He was a signer of the Declaration in 1776, and later in the same year went to France to seek the aid of that country

New York, 1952)

[6] Pa

from I

note 3

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[8] Paine here refers once more to the ascension to the throne of England by George I elector of Hanover, in 1714

[9] Charles James Fox (1749 1806) was a celebrated Whig statesman who held numerous positions of importance in the English government His speeches in the House of Commons have been collected in six volumes

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In a 'Lettre de M Thomas Paine à M Emmanuel Syeyes Paris le 8 juillet 1791 which appeared in the *Supplément à la Gazette nationale* for July 16 Paine promises to accept the challenge of [illegible]

author

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The war ended in 1795 with the defeat of General Kosciusko's forces and the third and final partition of Poland

[3] Maximilien de Robespierre (1758 1794) was the son of an unsuccessful French advocate and had himself studied law He was elected a member of the National Assembly in 1789 and thereafter played an increasingly important role in the French Revolution He was the leader of the Jacobins, the radical club which was in a large degree responsible for the Reign of Terror Robespierre was overthrown in 1794 by the Revolutionary Tribunal and guillotined on June 28 of that year

[4] Ca [illegible] to
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under the name of Louis Capet

The Guelphs and the Ghibellines were two opposing political factions in Italy and Germany Between the twelfth and the fourteenth centuries the conflict between these parties was responsible for much of the history of the two countries The term "Guelph" has since been used with various significations According to *Haydn's Dictionary of Dates* (New York, 1898), "Guelph (of uncertain origin) is the popular name of the present royal family of England"

Jean Paul Marat, a friend of Robespierre, was intimately connected during the French Revolution with the Reign of Terror

[5] Philip Dormer Stanhope (1694 1773), Earl of Chesterfield, was an English statesman and a man of brilliant wit, distinguished for his polished manner He is best known for his *Letters to his Son* (first published, 1774) His other writings include *Letters to his Godson* (first published, 1890), addressed to his adopted son

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[4] Capet was the name of a French royal house which is said to have provided Europe with 118 sovereigns. Louis XVI, by remote descent a Capet, was indicted by the National Convention in 1792 under the name of Louis Capet.

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consisted of 7 patients with pain due to coronary sclerosis, the second comprised 14 patients with varied aetiologies for ischaemic pain, and the third, 13 patients with pain related to increased cardiac work In the resting state, the amount of mechanical activity, myocardial oxygen requirements and coronary flow values in those with coronary artery disease were comparable to our normal patients If anything, myocardial oxygen and flow requirements were somewhat higher in the coronary disease group, possibly due to impaired mechanical efficiency or to a decrease in and, therefore, overloading of, residual functioning muscle mass

Angina pectoris and attendant changes in the electrocardiograms are classically brought on by effort Coronary haemodynamic changes were investigated, therefore, during a six minute period of exercise in the second group of patients Although there was a variable degree of change in coronary flow during effort, the average increase for the group was 16 per cent as compared with 25 per cent in the normal subjects (Table II) (Fig 41) At the same time, coronary venous oxygen saturation (normally unchanging) decreased progressively during exercise as much as 20 per cent over the control (Figs 39 and 40) with a marked widening in myocardial oxygen extraction (Gorlin and his colleagues, 1959b) This finding we have come to associate with an anatomically inadequate coronary circulation It has been seen even in the presence of some coronary reserve, as evidenced by a concomitant fall in coronary resistance

Of 14 patients with angina pectoris, coronary venous oxygen saturation failed to decrease in only 3 during exercise Of these, 2 had objective evidence for right-sided angina (*see below*), 1 patient remains unexplained—he had severe aortic stenosis and patent coronary arteries at subsequent necropsy, with angina pectoris actually provoked during the effort phase of catheterization study The possibility always exists that the area of most intense ischaemia allegedly responsible for the pain may be so small as to affect insignificantly a representative sample of coronary venous blood, particularly if other areas of muscle happen to be overperfused at the same time

There is no necessary relation between the observed oxygen desaturation on effort and the clinical occurrence of angina pectoris Rather, it would seem that the biochemical abnormality is a resultant of stress applied to an insufficient coronary circulation Angina pectoris infrequently occurs without severe involvement of at least two major coronary arteries (*Blumgart, Schlesinger and Davis, 1940) Such diffuse vascular disease, however, does not in any way mean that a patient* must have clinical angina pectoris, although electrocardiographic abnormalities on effort will be somewhat more frequent if looked for Thus, angina and coronary venous oxygen desaturation may have a common parent, but no proved cause-effect relationship Based on the statistical likelihood of angina pectoris occurring with involvement of only one coronary vessel, pain without biochemical abnormality should be seen in approximately one of five patients

The difference in response of the coronary venous oxygen saturation to effort is considered by us to be a cardinal objective sign of physiological coronary insufficiency and, therefore, in the appropriate patient, of diffuse coronary artery disease The two responses to effort are shown in Figure 31 This has served as an additional diagnostic test in patients with a confusing history of chest pain and equivocal electrocardiographic findings during the standard two-step exercise test

In the third group of patients with angina, the work load placed on the left ventricle was abnormally increased This was usually the consequence of severe aortic stenosis or aortic insufficiency Not only was the oxygen requirement of the left ventricle increased by the large work load, the huge hypertrophic muscle mass and th [illegible] failure but each valve lesion imposed f rther

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upon, not only because an increased flow [illegible]
also because hydraulic conditions were particularly unfavourable for this to occur The extent of vasodilatation required is best illustrated by comparative figures (Table III) In the normal subject, diastolic coronary vascular resistance equals

TABLE III

CALCULATED TOTAL CORONARY HAEMODYNAMICS IN PATIENTS WITH AORTIC AND MITRAL VALVE DISEASE

Patient	Diagnosis	*Coronary flow*[1] c.c./LV/ min.	O_2 *consumption*		*Diastolic coronary vascular resistance*[2] dyne sec cm $^{-5}$	*Brachial artery diastolic mean pressure*[3] mm Hg	*Total left ventricular work*[4] KgM/min	*Total left ventricular efficiency*[5] per cent
			total body c c / min	*total left ventricle* c c./LV/ min				
	Normal	100	250	12	60	92	7	29
J F	(AS)	264	224	29·9	15 1	63	8 8	14
A F	(AS)	400	—	53 0	14 3	85	38 5	35
W W	(AS AI)	320	275	38 0	14 3	72	33 6	43
D S	(AI)	266	278	35 2	19 0	73	26 0	36
M M	(MI)	190	196	23 4	33 4	83	10 8	22
E Y	(AS AI)	600	289	78 5	4 3	55	10 9	7

AS – Aortic stenosis *AI – aortic insufficiency* *MI = mitral insufficiency*

60 000 dyne sec cm $^{-5}$, in severe mitral insufficiency with increased oxygen needs but normal coronary perfusion, 33 400 in severe aortic stenosis with insufficiency, 4 300—this is seven per cent of the normal figure or a 14 fold vasodilatation Coronary flows were often 250 to 600 c c /left ventricular weight/min and oxygen consumption as high as 78 5 c c /left ventricular weight/min or about 25 per cent of total body oxygen consumption.

The right ventricle usually is not the seat of ischaemic pain unless intraventricular pressure is elevated Normally the right ventricle is supplied by smaller coronary arteries than the left In contrast, however coronary inflow occurs normally throughout the cardiac cycle because of the large differential between coronary arterial and right ventricular systolic pressure Consequently, not only

consisted of 7 patients with pain due to coronary sclerosis, the second comprised 14 patients with varied aetiologies for ischaemic pain, and the third, 13 patients with pain related to increased cardiac work In the resting state, the amount of mechanical activity, myocardial oxygen requirements and coronary flow values in those with coronary artery disease were comparable to our normal patients If anything, myocardial oxygen and flow requirements were somewhat higher in the coronary disease group, possibly due to impaired mechanical efficiency or to a decrease in and, therefore, overloading of, residual functioning muscle mass

Angina pectoris and attendant changes in the electrocardiograms are classically brought on by effort Coronary haemodynamic changes were investigated, therefore, during a six-minute period of exercise in the second group of patients Although there was a variable degree of change in coronary flow during effort, the average increase for the group was 16 per cent as compared with 25 per cent in the normal subjects (Table II) (Fig 41) At the same time, coronary venous oxygen saturation (normally unchanging) decreased progressively during exercise as much as 20 per cent over the control (Figs 39 and 40) with a marked widening in myocardial oxygen extraction (Gorlin and his colleagues, 1959b) This finding we have come to associate with an anatomically inadequate coronary circulation It has been seen even in the presence of some coronary reserve, as evidenced by a concomitant fall in coronary resistance

Of 14 patients with angina pectoris, coronary venous oxygen saturation failed to decrease in only 3 during exercise Of these, 2 had objective evidence for right-sided angina (*see below*), 1 patient remains unexplained—he had severe aortic stenosis and patent coronary arteries at subsequent necropsy, with angina pectoris actually provoked during the effort phase of catheterization study The possibility always exists that the area of most intense ischaemia allegedly responsible for the pain may be so small as to affect insignificantly a representative sample of coronary venous blood, particularly if other areas of muscle happen to be overperfused at the same time

There is no necessary relation between the observed oxygen desaturation on effort and the clinical occurrence of angina pectoris Rather, it would seem that the biochemical abnormality is a resultant of stress applied to an insufficient coronary circulation Angina pectoris infrequently occurs without severe involvement of at least two major coronary arteries (Blumgart, Schlesinger and Davis, 1940) Such diffuse vascular disease however, does not in any way mean that a patient must have clinical angina pectoris, although electrocardiographic abnormalities on effort will be somewhat more frequent if looked for Thus, angina and coronary venous oxygen desaturation may have a common parent, but no proved cause-effect relationship Based on the statistical likelihood of angina pectoris occurring with involvement of only one coronary vessel, pain without biochemical abnormality should be seen in approximately one of five patients

The difference in response of the coronary venous oxygen saturation to effort is considered by us to be a cardinal objective sign of physiological coronary insufficiency and, therefore, in the appropriate patient, of diffuse coronary artery disease The two responses to effort are shown in Figure 31 This has served as an additional diagnostic test in patients with a confusing history of chest pain and equivocal electrocardiographic findings during the standard two-step exercise test

• administration of this agent
n, 1959) resulted in coronary
extraction, indicating a drug-
tion At the same time, left

by nitroglycerin When the drug was given ... however, virtually no coronary vasodilatation was produced (Gorlin and his colleagues, 1959a), in fact, in occasional individuals, coronary arteriovenous oxygen difference actually widened Cardiac work invariably decreased The response suggested nearly complete utilization of the collateral and dilating capacity of the coronary tree, even in the resting state *Coronary flow could not increase substantially when challenged*

The exact mechanism of relief of pain by the nitrites remains unanswered by such studies It is interesting that angina pectoris is induced by drugs such as hydra-
... increase cardiac activity, while it may be
... rease cardiac activity, such as amino-
... effects on coronary vessels or cardiac efficiency Nitroglycerin may also relieve pain through release of local arterial smooth muscle spasm or improve local blood supply more rapidly than can occur in response to segmental ischaemia, or it may have both effects

Neill and his colleagues (1960) found that a monamine oxidase inhibitor (β-phenylethylhydrazine) had no direct action on the coronary circulation in the normal dog, yet it is purported to relieve anginal pain

Evaluation of coronary revascularization procedures

... have been proposed to improve coronary blood supply

credited on other grounds these workers drew conclusions based solely on resting determinations This may be inadequate Coronary flow is normal in patients with coronary heart disease at rest, the introduction of a new vascular supply could go undetected unless the coronary system were placed under a stress and a larger flow were needed. A small group of our patients were stressed by means of either a coronary vasodilator or with exercise Four patients were studied after internal mammary artery ligation and three patients after phenol de epicardialization Unfortunately, control observations were available in only two patients No improvement in coronary flow response was seen in these two, and coronary dynamics were grossly abnormal in the other subjects after surgery

CORONARY CIRCULATION IN CONGESTIVE FAILURE

Before discussing the coronary circulation in congestive failure, a brief review of current physiology in this disorder is pertinent The lesions may be subdivided biochemically into failure of energy production and failure of energy utilization

does right ventricular hypertension increase oxygen consumption requirements, but it curtails systolic coronary inflow as well, thus placing a dual load on the right coronary vasodilating reserve capacity

Observations have been made in 5 patients with so-called right-sided angina These patients had right ventricular hypertension without left heart involvement, in association with acute exercise-electrocardiographic changes seen only in the right precordial leads In 2 subjects, coronary flow dynamics were completely normal Necropsy in 1 revealed that the coronary sinus drained left ventricular muscle and, therefore, could not have reflected an abnormality of the right ventricle In the remaining 3 patients, coronary flow was fixed and coronary venous oxygen saturation decreased on effort In these individuals, the coronary sinus must have drained right ventricular muscle, presumably the site of effort ischaemia

Although the stresses are different, comparison has been made of the interpretation of the standard Master's test electrocardiogram with the interpretation of the coronary flow dynamics in 33 patients (Wagman and his colleagues, 1960) Of 12 patients, 11 with normal electrocardiographic responses had normal coronary dynamics On the other hand, the correlation between abnormal electrocardiogram and abnormal flow dynamics was not as clear-cut Ten of the group of patients were taking digitalis, and this is known to cause an abnormal exercise-electrocardiogram When patients taking digitalis were excluded, only 1 of 7 with abnormal flow dynamics had a normal electrocardiogram The electrocardiogram at rest was compared to the levels of coronary venous oxygen saturation in 71 patients No correlation was found between static depression of S–T segment, inversion of T waves and the level of oxygenation of myocardium as reflected by coronary venous blood

Although only a trend can be reported, the chronically ischaemic heart did tend to develop a greater amount of anaerobic energy than most normal hearts during the stress of effort This was reflected by an increased coronary venous lactate/pyruvate ratio No conclusions can be drawn at present as to whether this chemical change is related to the production of angina pectoris No change in arterial level or myocardial utilization of circulating catecholamines occurred in any of our angina patients Likewise, no detectable abnormalities were found in myocardial sodium or potassium exchange with or without pain Our studies thus far, then, have failed to elucidate the exact mechanism of pain production

Drugs in angina pectoris

Although used frequently in the presence of coronary artery disease, studies in normal man by two independent groups (Christensen and his colleagues, 1958, Maxwell and his colleagues, 1958) have shown that aminophylline induced a true coronary vasoconstriction, that is, myocardial oxygen consumption remained unchanged while coronary flow decreased and arteriovenous oxygen difference widened, mechanical efficiency fell Strangely enough, this drug rarely produces angina pectoris, and may relieve it On the other hand, hydralazine (Rowe and his colleagues, 1955), which in addition to increasing cardiac output apparently is a true coronary vasodilator (as evidenced by a steady oxygen consumption, rise in coronary flow and fall in arteriovenous oxygen difference), not infrequently causes angina in the susceptible patient Unfortunately, neither drug was studied extensively in patients with angina pectoris and the response may be different

THE EFFECT OF EXERCISE ON
CORONARY FLOW EXTRACTION RATIO
IN VARIOUS DISEASES OF THE HEART

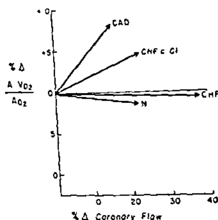


Fig 41 —The abscissa is per cent change in coronary flow during exercise, the ordinate is per cent in oxygen extraction coefficient ($A\text{-}V\ O_2/A\ O_2$) In the normal patients (N) and congestive f ... ntr (CHF) flow increased 2 c c

usually insignificant coronary insufficiency could be revealed during stress because of a primary loss of myocardial adaptability and efficiency, with greater energy requirement for a given task than normal The role of such coronary insufficiency during effort in causing further myocardial damage can at present only be specula-t

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rose stroke work remained unchanged but oxygen consumption ... terms of contraction time to correct for heart rate) generally increased Thus, while cardiac performance did not increase oxygen cost per systolic second did, suggesting that change in cardiac volume[1] and therefore, in tension, may have been related to the increased energy during effort (Levine and his colleagues, 1960)

Digitalis in congestive failure

The action of digitalis still remains a mystery despite its having been intensively studied both in man and animals In keeping with Szent Gyorgi s hypothesis, Regan and his colleagues (1959) reported that acute digitalization with acetyl strophantidin resulted in myocardial potassium and hydrogen ion loss and sodium uptake Gonlubol Siegel and Bing (1956) using a longer acting drug Cedilanid, described onl an elevated arterial potassium level without myocardial loss or

[1] As indirectly and only qualitatively measured by change in left ventricular diastolic pressure

(Olson, 1959) The former is rare and is best illustrated by beri beri heart disease The latter constitutes the bulk of clinical cases Failure can result either from a normal (or more often hypertrophied) ventricle performing an abnormally heavy work load for a long period of time, or from a ventricle abnormally decreased in functioning muscle mass doing a normal amount of work Under either circumstance, the heart ultimately dilates, cardiac output in relation to demand is decreased, and ventricular diastolic filling pressure is increased

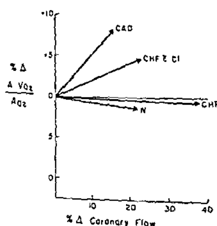
Blain and his colleagues (1956) found that energy availability to the myocardium, as shown by a normal oxygen and substrate utilization per 100 g of left ventricular muscle, was perfectly normal Mechanical work produced, however, was abnormally low and the efficiency of contraction, therefore, was subnormal Levine and his colleagues (1960) have made similar findings when heart failure was due to increased work, as in aortic valve disease Oxygen consumption for the total left ventricle[1] in relation to the increased total work done was still out of the normal proportions and, hence, mechanical efficiency usually decreased (Table III) (Fig 38)

Bing's group reported a reciprocal decrease in coronary flow and increase in oxygen extraction at rest in their failure patients, with maintenance of "normal" oxygen consumption per unit weight of heart The changes, although statistically insignificant, were constantly observed A similar reciprocal alteration has been seen in mitral stenosis As described below, coronary insufficiency is not always a part of congestive failure, hence the low coronary flow and high oxygen extraction with low coronary venous oxygen content needs to be explained on some other basis The coronary bed apparently shares in the peripheral vasoconstriction of the low output state and therefore, net coronary vascular resistance is the resultant of two competing reflexes Messer and his colleagues (1960) have found an inverse relationship between oxygen extraction coefficient and effective cardiac output Extraction was abnormal when output was less than 3 0 L/min /M^2 It is significant in this regard that in beri beri (a high output failure state) there is coronary vaso dilatation It is difficult to imagine that the myocardium "chooses" to function at an abnormally low oxygen tension, particularly if anatomical coronary insufficiency is not part of the picture The effect of chronically decreased oxygen tension on myocardial performance is completely unknown

The response to effort in congestive failure is distinctly different from the normal Work output per minute increases, but only as a consequence of increased heart rate, while work per beat remains unchanged or falls Hence, the increment in work output is subnormal This work output is delivered at about the same (usually subnormal) efficiency as at rest (Fig 38) This is in contrast to the normal heart, in which efficiency generally increased Fixed efficiency necessarily implies a proportionately greater requirement for oxidative energy (and hence coronary flow increment) during effort in patients with congestive failure In six patients flow increased 38 per cent above control indicating an adequate coronary system (Fig 41) In five other patients the disproportionate demand for oxygen during effort exceeded coronary reserve as a result coronary venous oxygen saturation de creased with progressive effort although coronary flow increased 22 per cent Thus,

1 Necropsy determination These hearts invariably weighed two to five times the predicted weight Thus oxygen consumption and coronary flow were larger by this factor than as mea sured per 100 g

THE EFFECT OF EXERCISE ON CORONARY FLOW-EXTRACTION RATIO IN VARIOUS DISEASES OF THE HEART



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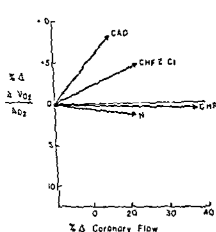
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decreased while oxygen consumption remained unchanged. On the other hand, in the failed heart contractility increased without any change in oxygen consumption. This indicated an improvement in conversion of available energy to useful work by

[1] As indirectly and only qualitatively measured by change in left ventricular diastolic pressure.

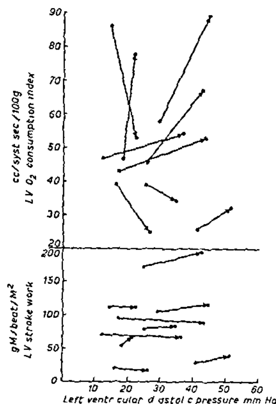


Fig 42—*Changes in left ventricular diastolic pressure from rest to exercise in congestive failure are plotted against left ventricular stroke work index and against oxygen cost per systolic second per 100 g left ventricle Note the fixed stroke work but generally increased oxygen cost, in association with an elevated diastolic filling pressure*

digitalis How much of the apparent increase in efficiency was due solely to digitalis induced slowing of the heart as opposed to decrease in heart size was not apparent from Bing's data Conceivably, the increase in contractility could have been equally as costly per unit of work if the number of systolic seconds decreased appreciably with the decrease in rate

Coronary flow dynamics did not change during digitalis administration This was seen, not only with digitalis, but also when patients with heart failure were compared with the normal subjects Thus, oxygen consumption per unit of heart weight was normal and remarkably constant, but the work achieved for this oxygen supply varied considerably Why the heart and its intrinsic circulation came into such a relationship is totally unanswered at present

MISCELLANEOUS CONDITIONS

Aortic valvular disease

Aortic valvular disease has been considered in some detail in the section on angina pectoris Early animal experiments in acute aortic insufficiency demonstrated a decreased coronary flow, probably a function of a near terminal state (Green, 1936) Later studies of the acute (Wegria and his colleagues, 1958b) and the chronic lesion (West, Wendel and Foltz, 1959), however, revealed an increased

coronary flow and increased oxygen consumption (as one would expect considering the enormous work load in aortic insufficiency) Similar findings have been made in man (Regan and his colleagues, 1956, Gorlin and his colleagues, 1959a) In fact, [illegible] have reported that coronary flow and oxygen consumption are in [illegible] basis As a resul [illegible] mean pressure, [illegible]

Mitral stenosis

Significant mitral stenosis, although a disease which affects (if either chamber at all) only the right ventricle, is often associated with a reduced coronary flow, widened arteriovenous oxygen extraction, but an *oxygen consumption* adequate to peripheral dynamics at rest (Bing and his colleagues, 1949, Read and his colleagues 1955) These findings, however, have no single basis First, the oxygen consumption is often reduced due to decreased left ventricular mechanical activity, [illegible] Secondly coronary flow may be decreased and [illegible] our studies during effort in pulm [illegible] third basis of alteration in coronary dynamics in mitral stenosis, namely, [illegible] an occasional patient with overwhelming right ventricular hypertrophy and pulmonary hypertension, the left coronary artery may supply, and the coronary sinus drain the right in addition to and possibly in preference to, the left ventricular myocardium. Under these conditions, coronary flow may even be increased per unit weight and not only may coronary venous oxygen saturation be low at rest, but the stress of effort may elicit a further decrease in venous oxygen saturation as evidence of anatomical coronary inadequacy These three patterns of response have made interpretation of published reports extremely difficult

Hypertensive heart disease

Bing (1951) described coronary flow studies in patients with hypertensive heart disease and deduced that coronary flow and oxygen consumption of the left ventricle were increased because these values were normal per 100 g muscle in chronically hypertrophied hearts These findings were confirmed in the dog by West and his colleagues (1959) In fact they reported that early after the production of renal hypertension coronary flow and oxygen consumption were increased per unit weight of heart but became normal as ventricular hypertrophy developed They believed that the coronary vessels shared in the general vasoconstrictor reaction although their data do not necessarily support this when the total heart as opposed to unit heart weight is considered

Thiamine deficiency

Thiamine deficiency has been studied in dogs by Hackel Goodale and Kleinerman (1953) They showed increased coronary flow and decreased myocardial oxygen extraction They attributed this to the same metabolic block ' which

resulted in inefficient lactate and pyruvate utilization by the heart, that is, deficient cocarboxylase These findings, however, could just as readily indicate participation of the coronary circulation in the general vasodilatation of beri beri Somewhat similar findings have been made in man

Thyroid disease

Although Bing and his colleagues (1949) reported only a slight increase in coronary flow and a normal oxygen consumption, both Rowe and his colleagues (1956) and Leight and his colleagues (1956) found these two parameters to be increased in hyperthyroidism When plotted in terms of units of work and increments of heart rate, the increase in oxygen consumption in both reports appeared to be directly related to mechanical work performed, and not disproportionately increased under local thyroid stimulation There was the slight suggestion, in comparison of Leight's normal and hyperthyroid patients, that coronary vasodilatation had occurred in excess of oxygen requirements This is inferred from the somewhat narrowed arteriovenous oxygen difference and the slightly decreased coefficient of oxygen extraction Whether this is, again, coronary participation in systemic vasodilatation is unknown

Rowe presented studies not only in the hyperthyroid state, but also studies repeated in the same patient three to four months after induction of myxoedema This excellent work indicated a reduction in oxygen consumption *pari passu* with decreased cardiac activity, and a commensurate reduction in coronary flow with normal myocardial oxygen extraction Because decreased flow requirements were directly tailored to decreased oxygen requirements, no preferential regional vasoconstriction, and hence normal oxygen extraction by the heart, was seen in myxoedema

SUMMARY

A resume is presented of past work and studies in progress concerning the coronary circulation The author has attempted to evaluate pertinent observations of others and to synthesize these with the work from his own laboratory With these goals in mind general concepts methodology, the normal subject and the more common diseases involving the heart have been discussed

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CHAPTER 14

THE DIAGNOSIS OF CORONARY HEART DISEASE

SAMUEL PROGER AND LOUIS A. SELVERSTONE

THE PRECISE diagnosis of coronary heart disease remains a function of the pathologist In the best of circumstances the clinical diagnosis of the disease is inexact Even after detailed study, patients frequently die with unrecognized coronary heart disease Others, in whom the diagnosis has been made with confidence, may be found at necropsy to be free from significant coronary disease

The physician can diagnose coronary heart disease only from its secondary effects—from the cardiac damage it has produced, or from the symptoms it has caused Unless structural cardiac damage or subjective distress has been produced, the disease cannot be diagnosed In spite of gratifying recent progress, our objective methods of assessing cardiac damage are still relatively crude, subject to limitations and numerous sources of error Diagnosis based upon a patient's complaints alone is even less reliable

In spite of these difficulties in the clinical diagnosis of coronary heart disease, an attempt must be made to attain precision, since correct diagnosis is of supreme importance as a guide to treatment and to prognosis It is the purpose of this chapter to discuss the diagnosis of coronary heart disease within the framework of a clinical classification which, while admitting frequent ignorance of what is occurring anatomically in the heart, still attempts to provide a useful basis for planning therapy and for judging prognosis

Although diseases other than atherosclerosis may interfere with coronary blood flow, this discussion will be confined to atherosclerotic coronary heart disease Other causes of coronary arterial disease—congenital anomalies, coronary embolism, luetic involvement of the ostia, periarteritis nodosa—are quite rare Unless diagnosis can be made from manifestations of the underlying disease elsewhere in the body, they will remain undiagnosed Hence little will be gained from a detailed discussion of these uncommon conditions at this point The discussion will therefore be based on the following classification

CLASSIFICATION OF CORONARY HEART DISEASE

I Acute coronary heart disease
- A With recognizable myocardial infarction
  - 1 Large infarction
  - 2 Small infarction
- B Without recognizable myocardial infarction
  - 1 Onset of exertional angina pectoris
  - 2 Sudden worsening of exertional angina pectoris

3 Onset of non exertional angina pectoris, or of prolonged non-exertional cardiac pain

II Chronic coronary heart disease

A. Presenting with clinical manifestations

B Presenting without clinical manifestations

1 With history of an acute episode

2 Without history of an acute episode (undiagnosable)

In presenting this classification, some justification seems necessary Clinical thinking tends to become set in patterns, as do other types of thinking This is especially true in a consideration of coronary artery disease There was first a pattern that placed all pain associated with coronary disease in the category of angina pectoris, or some descriptive variant, such as angina decubitus or status anginosus Following the clinical description of coronary thrombosis, there was a period of some two decades when the pain of coronary heart disease was classified either as angina pectoris or as acute myocardial infarction It soon became apparent, however, that these two designations alone were inadequate to incorporate all the painful clinical syndromes resulting from coronary heart disease In an effort to expand this rather limited classification, other terms were introduced

r, Dack and Jaffee, 1948), and with an 1937, Sampson and Eliaser, 1937)

of severe semantic confusion unless some initial effort at clarification of terminology is made

The purpose of any disease classification is to establish criteria by means of which the clinical status of an individual patient may be estimated Necessarily, such a classification must derive from the accumulated medical knowledge con-

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of the earlier terminology becomes unnecessary, and a clearer concept of the course of the disease emerges

ACUTE CORONARY HEART DISEASE

Acute coronary heart disease is considered to be present when there has been a recent abrupt change in a patient's status with regard to the clinically recognizable

manifestations of coronary heart disease. Its most dramatic form is the acute myocardial infarction However, this category also includes the onset of angina pectoris, a recent change in the severity of angina pectoris, and the appearance of prolonged non exertional cardiac pain without recognizable infarction The common denominator of these situations and the reason for grouping them together is the clinical observation that all such patients with acute coronary heart disease are in danger of sudden death within the first two to three weeks from the onset of the acute phase This will be discussed below in more detail

Acute coronary heart disease with recognizable myocardial infarction

It is unnecessary at this point to review the usual clinical picture of acute myocardial infarction The diagnosis is usually an obvious one, and the clinical suspicion aroused by the patient's complaint of severe chest pain is usually quickly confirmed by physical examination, serial electrocardiographic changes, and typical changes in the serum enzyme levels

Occasionally, however, the diagnosis may at first be obscure A patient with typical chest pain may have no objective diagnostic findings initially, or the chest pain may be unusual in its character and distribution, causing one to suspect some other cause Sometimes an electrocardiogram taken for another reason may show changes highly suggestive of an acute myocardial infarction in the absence of a confirmatory clinical history When the diagnosis is at first not clear, continued observation over a period of a few days will usually reveal whether or not an infarction has occurred, and in most cases little harm will be done if one takes sufficient time to be sure of the diagnosis

In an appreciable percentage of patients with suspected infarctions the electrocardiogram may prove of little assistance For example, it is well known that high posterior wall infarctions may cause no diagnostic electrocardiographic abnormalities when standard leads are used The electrocardiogram may also be obscured by left bundle branch block or by evidence of previous serious cardiac damage Whether or not the newer spatial vectorcardiographic techniques will prove superior to standard electrocardiographic methods is still controversial (Milnor, 1958)

During the past few years, the serum enzyme tests for myocardial infarction—in particular the serum transaminase and the lactic dehydrogenase determinations—have provided additional help in diagnosis In a case in which infarction is suspected, a sharp rise in the serum transaminase titre during the first 24–36 hours (LaDue, Wroblewski and Karmen, 1954) or a rise in the lactic dehydrogenase level during the first week (Snodgrass and his colleagues, 1959) may allow one to make a diagnosis otherwise impossible However, these tests are by no means the complete answer to the problem since high values may also be observed in the presence of chronic liver disease jaundice, muscular injury and other less well defined conditions If the patient is seen 10 or 14 days after the acute onset of symptoms, the tests are usually of no value

A good history alone should suffice for a presumptive diagnosis However, if all objective tests remain negative, the diagnosis cannot be substantiated Probably an appreciable number of patients of this type who show no objective evidence of muscle damage do indeed have small infarctions but this cannot be proved in an individual patient These patients are best considered to have "acute coronary

heart disease without recognizable infarction", a diagnosis discussed in more detail below

At times the history may not be of great assistance in diagnosis Careful pre-operative and post operative electrocardiographic studies of patients subjected to surgery under general anaesthesia show a significant percentage with electrocardiographic changes characteristic of myocardial infarction during the immediate post operative period, even though they have had no symptoms It may be presumed that the infarctions occurred during anaesthesia, or during the immediate post operative period while the patients were under the influence of opiates and mentally obtunded (Mendelsohn and Monheit, 1956) Psychotic patients frequently have infarctions without complaining of chest pain, and the diagnosis in such patients will depend entirely upon a coincidental routine electrocardiogram, or upon associated prostration, cardiac failure, fever, or pericardial friction rub (Marchand, 1955) Finally there is a small group of patients who have "silent infarctions without pain at any time Most of these patients will, however, upon close questioning admit to an episode of dyspnoea, syncope, indigestion, or other unusual symptom which may be assumed to represent their acute infarction

When the clinical history is atypical, proportionately greater weight must be placed upon the laboratory studies Even after exhaustive study, a few cases will remain in which one cannot be sure whether an infarction has occurred In these cases if one can be reasonably certain that the pain is of cardiac origin, the actual

[illegible] embolization from mural thrombi and ventricular rupture [illegible] cations do not occur with the small infarctions, which probably have the same

recognizable small infarctions This shift may become even more pronounced as diagnostic methods become yet more sensitive

Acute coronary heart disease without recognizable myocardial infarction

When a patient develops an acute myocardial infarction, the underlying pathological situation in the heart is clearly defined Within limits, one can localize the vascular obstruction, estimate the size of the infarction and visualize the day to [illegible] When however a patient with rare and [illegible] gins to have severe and frequent angina [illegible] a patient develops a prolonged attack of cardiac pain without objective evidence of myocardial damage, the pathological basis for these symptoms is less clear Certainly something acute must have happened [illegible]

[illegible] the purpose of separating coronary heart disease into acute and chronic' categories is to provide a useful guide for therapy and prognosis Within the 'acute group, large myocardial infarctions present certain

clinical complications which are quite distinct from those seen in acute cases without such infarction As noted above these are potentially troublesome mural thrombi, ventricular rupture, shock, and heart failure, including pulmonary oedema It is because of these complications that one attempts to establish whether or not a large infarction has occurred when a patient complains of cardiac chest pain

The most important complication of acute coronary heart disease, however, whether or not recognizable infarction is present, is the liability to sudden death from conduction disturbances (cardiac standstill or ventricular fibrillation) This complication presumably results from myocardial ischaemia The relationship is by no means quantitative, for clinically slight ischaemia may at times be followed by a fatal conduction disturbance, while a clinical picture indicative of extensive and severe ischaemia may prove benign

Sudden death occurring in a patient with acute coronary heart disease with a large infarction probably results from conduction disturbances along the ischaemic margins rather than in the central necrotic area of the infarct Hence a large infarction presents prognostic problems related both to the central necrotic area (failure, embolization, shock, rupture) and the marginal ischaemic area (ventricular fibrillation or standstill)

Acute coronary heart disease without a large infarction on the other hand is dangerous only because of the conduction difficulties related to the simple ischaemia Hence its dramatic and central complication is sudden death It is because of *this potential complication that acute coronary heart disease needs especially to be* recognized clinically in any of its forms It is because of this potential complication also that the terms "mild" or "slight" heart attacks may be misleading Any condition that may quickly result in sudden death had best not be viewed as mild or slight A "slight stroke" unless it progresses to a large stroke is a relatively minor clinical event An acute coronary attack, however slight, is still fraught with quickly fatal consequences and hence deserves special consideration and respectful concern

Parenthetically, it may be said that there is probably no contribution in the field of cardiovascular disease short of the elimination of atherosclerosis that would do more to prolong useful life than the discovery of a means of preventing or sharply curtailing the conduction disturbances that produce the sudden death in acute coronary heart disease The presumed myocardial ischaemia that is responsible for the conduction disturbances is probably otherwise relatively unimportant That is to say, save for the tragic appearance of ventricular fibrillation or standstill, good functional recovery would be the rule

Because of the danger of sudden death with acute coronary heart disease, this diagnosis must be suspected in any patient middle aged or above, who spontaneously develops chest or upper abdominal distress that is not clearly or easily *identifiable as non cardiac Given such a patient with vague chest discomfort that* has no diagnostically helpful relationship, and in whom there are no objective evidences of heart disease, one is faced in the first instance with the necessity of excluding this diagnosis Other diagnostic possibilities are usually not so urgent that they cannot be deferred until there has been the fullest possible consideration of the cardiac status

There should be no diagnostic difficulty when a patient presents himself with a

history that is fairly typical of the pain of acute coronary heart disease even though there are no objective findings. This includes patients with the onset of classical angina of effort, or the acute spontaneous worsening of pre-existing angina The typical history should suffice for a tentative diagnosis of acute coronary heart disease

The patient with an atypical history, however, may present himself with little more than mild to moderate substernal discomfort that comes and goes spontaneously and is often associated with belching and indefinite upper abdominal distress, often attributed to "indigestion". The discomfort may extend into the neck If the distress comes on when the patient is in the supine position, relief may be noted in the sitting position There may be a feeling of restlessness and even of concern without apparent reason. In such a situation, one can do little more than conclude that it is *impossible to eliminate acute coronary heart disease* as a diagnosis If an electrocardiogram can be recorded during the course of the pain,

conditions

to remember that coronary heart disease and cardiac neurosis often coexist.

Case histories

The following cases illustrate special diagnostic difficulties.

the symptoms subsided considerably, and after two weeks of treatment with anticoagulants and rest, he was allowed to go home and advised to restrict his activities moderately over the next few days Two days later he was readmitted with acute myocardial infarction

In this case the acute coronary heart disease was atypical in its onset, and the diagnosis was established only by the subsequent course

The symptoms of acute coronary heart disease without myocardial infarction usually subside spontaneously, although sometimes only after two to three months This is true whether the cardiac distress is mild and typical or severe and atypical In the latter instance, the patient may be bedridden and totally incapacitated Such patients are sometimes viewed as terminal and the condition as intractable when, in fact, they may be neither terminal nor intractable For just as mild typical angina pectoris may end in a fatal myocardial infarction, so severe angina decubitus may end in spontaneous recovery It is hard to dissociate severe angina pectoris from severe coronary disease but the two are not synonymous

When acute coronary heart disease is suspected, there is danger in exercise tests and other strenuous diagnostic procedures, including x-rays It is often in just such patients that strenuous diagnostic procedures are likely to be used

The heart may be already labouring under difficulties and the coronary status may still be unresolved It would manifestly be unwise to submit such a heart to unnecessary work However, once the coronary status has become stabilized, that is, once chronic coronary heart disease has become established, it is likely that exertion, in moderation, is not harmful In fact, there are some who believe that it may even be desirable

"Smouldering" coronary heart disease

The acute form of coronary heart disease may begin without recognizable major infarction and yet may progress to such an infarction It is this sequence of events that led to the designation "impending" myocardial infarction However, most such acute phases do not culminate in a major infarction This period might just as properly be called "impending" ventricular fibrillation or "impending" recovery, since these are also common consequences of this acute state

It is indeed likely that this acute syndrome is often (perhaps even in the majority of instances) undiagnosed This is indicated by the fact that so many occlusions are found at necropsy when there has been no clinical evidence of coronary disease It would seem preferable until or unless an infarction does occur to adhere to the simple designation of acute coronary heart disease without recognizable infarction for the period that has been referred to as "impending" myocardial infarction As a convenience, "smouldering coronary heart disease" may be a useful descriptive term for this state The word "smouldering" has the virtue of indicating

(a) that the condition is not static
(b) that it may flare up (ventricular fibrillation or stand-still, or major infarction) and
(c) that it may subside quickly without significant residue

"Acute coronary failure" and "acute coronary insufficiency" are terms commonly used for the smouldering state and they are often referred to as a clinical

ndrome intermediate between acute myocardial infarction and angina pectoris
fact, this syndrome is sometimes called the "intermediate syndrome" (Graybiel,
[illegible] one acute syndrome (acute coronary
[illegible]

Prognostic consid [illegible]

It has lately be [illegible]
acute coronary attack [illegible] that of an apparently normal person. A coronary of this [illegible]
[illegible]
fact
[illegible]
[illegible] an error in
[illegible], in chronic
[illegible] onary heart
coronary heart disease it is safer to [illegible]
disease it is safer to err in the opposite direction

Acute cardiac pain due to extracardiac factors

Acute ischaemic changes may occur in the heart muscle in the absence of related intrinsic changes in the coronary vessels. Myocardial changes may be induced by
[illegible]

They cannot be characterized as acute coronary heart disease since there is no acute anatomical change in the coronary arteries

However, if the extracardiac factors induce sufficiently prolonged myocardial [illegible]

is provoked by unusual exertion, of a type the patient has not undertaken for several months, the pain may simply represent an underlying incompetence of the coronary circulation for that particular exertion This incompetence might not have become evident except for the severe stress to which the patient was subjected, and may represent only diminished coronary reserve rather than acute coronary heart disease Nevertheless, such patients should be watched quite carefully, since the possibility of an acute coronary insult cannot always be entirely excluded

CHRONIC CORONARY HEART DISEASE

The outlook and management of acute coronary heart disease without recognizable myocardial infarction on the one hand, and chronic coronary heart disease on the other are strikingly different Hence it becomes extremely important to know when one stops and the other begins All non fatal acute coronary heart disease ultimately progresses into the chronic stage The transition into this stage from acute myocardial infarction is fairly well established Pathological data would seem to indicate that this time is about two to three months (Mallory, White and Salcedo Salgar, 1939), and clinical experience is in agreement In the case of acute coronary heart disease without infarction, however, the time of transition is not so clear

Difficulty in deciding when "acute" coronary heart disease may be considered 'chronic' arises from our ignorance of the pathological basis for the symptoms of acute coronary heart disease Does the onset of angina pectoris represent a coronary thrombosis without myocardial infarction an acute narrowing of a coronary artery beyond a critical threshold, or the occurrence of a small, unrecognizable myocardial infarction? When angina pectoris suddenly improves, as often happens, does this mean that adequate collateral circulation has developed, or does it mean that an ischaemic area of myocardium has finally infarcted completely? If, after a month or two of mild angina pectoris, a sudden, severe myocardial infarction occurs should we consider it a complication of a prolonged acute phase or should we consider it a fresh acute episode?

Since, in patients with acute coronary heart disease without recognizable infarction, we cannot easily correlate symptoms with anatomical changes in the heart, our decisions concerning management must be somewhat arbitrary Clinical experience with acute coronary heart disease without recognizable infarction has been similar to that with myocardial infarction in terms of the danger of sudden death The danger is appreciable during the first two or three weeks and then rapidly diminishes It would seem reasonable to conclude that after about two to three months from the onset of acute coronary heart disease, the process may be considered a chronic one, in the absence of a recognizable exacerbation during the interim An exacerbation after this period may best be considered as a second acute episode.

Chronic coronary heart disease with stable angina pectoris

Typical angina pectoris may be defined as a repetitive unpleasant sensation perceived in the upper half of the body, cardiac in origin, precipitated by stress, short in duration, and relieved completely by rest There are, of course, many clinical variants It cannot be emphasized too strongly that angina pectoris is

nd bears no necessary relationship to any objective

may exist between competent physicians concerning whether ... angina pectoris And there may be no way to resolve the dilemma

Because of the entirely subjective nature of angina pectoris its diagnosis presents a real test of clinical skill An experienced clinician may frequently elicit a classic history of angina pectoris in situations where less experienced physicians have completely ruled out the diagnosis Much depends upon the patient s level of education. The manual labourer for example may find it difficult to think of himself and his complaints in abstract terms Such a patient may honestly deny he has ever had chest pain with exertion Just as honestly he may give a classic

terms appro

, when you are

catch in your chest?

There are many extracardiac causes of chest pain which may be confused on occasion with angina pectoris However, the functional chest pain so frequently associated with anxiety neurosis is perhaps the most troublesome source of confusion. As discussed above the characteristic picture of cardiac neurosis causes

are present

can have only confirmatory value A normal electrocardiogram is not at all unusual with angina pectoris An abnormal electrocardiogram in a patient with cardiac neurosis does not necessarily transform his symptoms into angina pectoris

Special tests

is atypical in its distribution exercise tests may make possible a definite decision concerning diagnosis when interpreted *in the light of the clinical history*

Chronic coronary heart disease *with objective cardiac abnormalities in the absence* of angina pectoris

The classification of chronic coronary heart disease also includes many patients without angina pectoris who demonstrate electrocardiographic abnor

"arteriosclerotic heart disease," with only superficial study, patients over the age of 50 years who have heart failure without obvious evidence of valvular heart disease

It is not rare, in electrocardiography, to find definite evidence of an old myocardial infarction in the absence of a suggestive clinical history In such a patient one can be reasonably sure that chronic coronary heart disease exists With less than diagnostic changes, however, the electrocardiogram alone does not allow the diagnosis of coronary heart disease Recent work has re-emphasized the extremely wide range of the normal in electrocardiography, and even bundle branch block and complete heart block have been found to occur as benign variants The large number of extracardiac factors which may affect the T waves is well known Spatial vectorcardiographic methods have re emphasized that many changes previously considered to be abnormal are actually the result of normal depolarization Accordingly, unless there is clear-cut electrocardiographic evidence of an old infarction, one cannot, from the electrocardiogram alone, make the diagnosis of coronary heart disease This remains a clinical diagnosis, and the electrocardiogram at best can only suggest the possibility that it exists

A somewhat analogous situation exists with patients who show obscure cardiac enlargement or heart failure in the absence of a definite history of acute or chronic cardiac pain In the younger age group such patients are usually studied thoroughly and careful consideration is given to the possible presence of unusual types of heart disease In older patients, however, in direct proportion to increasing age, other diagnostic possibilities frequently are neglected This does little harm in patients found eventually to have cardiac amyloidosis, endocardial fibroelastosis, or other similar so far irreversible diseases since supportive therapy is essentially the same Tragedy results, however, when potentially treatable heart disease is allowed to remain unrecognized until the situation has deteriorated too far These cases of so-called "arteriosclerotic heart disease" may include unrecognized thyrotoxicosis and myxoedema with heart failure, constrictive pericarditis, tuberculous pericarditis, and valvular heart disease with soft or inaudible murmurs In older patients with very tight aortic or mitral stenosis and heart failure, murmurs may be very soft or even inaudible and diagnosis may be quite difficult Yet some of these patients do very well after valvular surgery, and it is important that such cases should not be overlooked

Hence it is well to consider the diagnosis of "coronary heart disease" or "arteriosclerotic heart disease" questionable in the absence of a history of angina pectoris, of acute coronary disease in the past, or of truly diagnostic electrocardiographic changes

Chronic coronary heart disease without clinical manifestations

With history of an acute episode

It is well known that after recovery from a myocardial infarction, there may be no cardiac symptoms, and even the electrocardiogram may return to normal after a few months The patient may then have no subjective or objective evidence of coronary heart disease Similarly, it is not rare for patients with definite angina pectoris to experience complete remission, and thereafter be free of symptoms Such patients undoubtedly have chronic coronary heart disease, but the diagnosis

... the history After a year or two of freedom from

normal subjects in the same age group.

Without history of an acute episode (undiagnosable)

As mentioned previously, coronary heart disease can as yet be diagnosed only from its secondary effects Even extreme degrees of coronary atherosclerosis may exist in patients free from any sign or symptom of the disease. It is known that most patients beyond middle age who are presumed to be normal do, in fact, have demonstrable evidence (at death from non-cardiac causes) of significant coronary artery disease in the form of one or more coronary occlusions (Schlesinger and Zoll, 1941)

Since acute coronary episodes may go unrecognized, the chronic form of coronary heart disease following such an unrecognized episode will be undiagnosable if there are no tell-tale after-effects in the form of one or more complications

in the general population, middle aged or beyond It is likely that this form of clinically unrecognizable coronary heart disease is of considerable importance in determining survival rates in the "normal" population, for these survival rates represent the sum of the rates of the truly normal population plus that portion of

is significantly longer than now believed.

CHRONIC CORONARY HEART DISEASE AND SUDDEN DEATH

state Whether or not patients with stable angina pectoris are prone to this catastrophe is open to question.

That patients with chronic angina pectoris appear to die without warning is undeniable In many such patients, for obvious reasons a history of the incidents immediately preceding the death is unobtainable However, when a history can be

... spontaneous development of slight worsening of pre existing angina pectoris

... A sharp clinical awareness provides the principal means for diagnosing

15—M.T.C.

"arteriosclerotic heart disease," with only superficial study, patients over the age of 50 years who have heart failure without obvious evidence of valvular heart disease

It is not rare, in electrocardiography, to find definite evidence of an old myocardial infarction in the absence of a suggestive clinical history In such a patient [illegible] wide range of the normal in electrocardiography, and even bundle branch block and complete heart block have been found to occur as benign variants The large number of extracardiac factors which may affect the T waves is well known *Spatial vectorcardiographic methods have re-emphasized that many changes* previously considered to be abnormal are actually the result of normal depolarization Accordingly, unless there is clear-cut electrocardiographic evidence of an old infarction, one cannot, from the electrocardiogram alone, make the diagnosis of coronary heart disease This remains a clinical diagnosis, and the electrocardiogram at best can only suggest the possibility that it exists

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the disease itself had changed (Reproduced by courtesy of the American Heart Association, Inc)

CONCLUSIONS

In the present state of knowledge, there are only a few necessary major diagnostic considerations in coronary heart disease. These may be framed in the following questions

These are necessary considerations, since they provide the basis for prognosis and therapy

Basically, there are only two types of coronary heart disease, namely, acute and chronic. All the clinical syndromes associated with coronary heart disease can be conveniently incorporated into these two categories It may be that no other

disease are subject to sudden death, but this danger is probably not great for patients with chronic coronary heart disease.

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this condition Not infrequently the diagnosis is made retrospectively A necropsy is usually of no help

For instance, a 58 year old man with angina pectoris of long standing died suddenly while on the golf course and undergoing no unusual exertion It was later learned from his golf partner that the patient had been complaining of ' indigestion" for several hours and had taken a number of antacid tablets while playing golf The ' indigestion" was in all likelihood acute coronary heart disease Save for the fortuitous information obtained from his golf partner, this might have been considered a case of sudden death with chronic angina pectoris

A similar situation occurred when a middle aged business man with known exertional angina pectoris happened to mention during an incidental telephone conversation that he had had several attacks of angina pectoris while at rest that morning Over his strenuous objections, he was prevailed upon to come at once by taxi to the hospital An electrocardiogram was entirely normal Nevertheless, admission to hospital was insisted upon Within half an hour he died suddenly Necropsy revealed only chronic coronary atherosclerosis without a recognizable acute infarction or thrombosis In this case, except for the incidental telephone conversation, the presence of probable acute coronary disease might never have been known, and this too would have been considered a case of sudden death without warning, with chronic angina pectoris

It is theoretically possible that an acute narrowing of a coronary artery may be insufficient to produce cardiac discomfort and yet be sufficient to produce enough myocardial ischaemia to cause ventricular fibrillation If myocardial infarction may on rare occasions be silent ', then sufficient myocardial ischaemia to cause sudden death may also be ' silent ' If this occurs it provides an example of undiagnosable acute coronary heart disease, and in any event it is sufficiently rare as to be of no great practical importance

This would suggest that a patient with chronic angina pectoris may be reassured that unless there is an abrupt change in the character of his distress he need not be unduly concerned, for the prognosis in chronic angina pectoris is the prognosis of the next attack of acute coronary heart disease On the other hand, he should be warned that if there is an abrupt change in the clinical picture he should consult his physician at once

GRADUALLY WORSENING CARDIAC PAIN

The sharp separation of all patients with coronary heart disease into acute and chronic categories, as described above leaves little place for the concept of a gradual worsening of cardiac discomfort, such as the gradual increase in severity of angina pectoris In this connexion, the following comment from a paper published in 1951 (Proger 1951) seems equally pertinent today

> Coronary disease with pain does not usually proceed in a smoothly or even ir regularly progressive manner from mild to moderate to severe angina pectoris as one

(

be that the gradual narrowing of larger coronary vessels favours the development of

CHAPTER 15

THE PROGNOSIS OF CORONARY HEART DISEASE

HAROLD FEIL

PROGNOSIS of coronary heart disease has become increasingly important because of the world wide incidence of the disease and because of the many new therapeutic

therapy.

"Nomenclature in Coronary Artery Disease"

' Electrocardiographic and Blood Pressure
ery ' *New Engl J Med*, **254**, 307
in the Diagnosis of Myocardial Infarction"

-s of Coronary Atherosclerosis ' *Mod Conc*
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records of University Hospitals of Cleveland. The average duration of life

died before anticoagulation was accepted therapy and at that time many of the patients with mild infarction were treated at home.

METHODS OF COMPUTING LONGEVITY

in the past because of the recognition of the mild cases, the better treatment and programme after recovery, and the more satisfactory understanding and co-operation of the patient It is not proper to calculate average length of life except

and without clinical infarction have a better outlook

MILD CASES OF MYOCARDIAL INFARCTION

Patients with chest pain, inverted T waves, especially in the precordial leads, or depression of the R(S)T interval as the only electrocardiographic abnormality and without severe systemic reactions such as fever, hypotension, increased erythrocytic sedimentation rate, elevated transaminase level, have been described as suffering from non transmural infarction, coronary insufficiency (Master and Jaffe, 1951), and coronary failure (Blumgart, Schlesinger, and Zoll, 1941)

The uncertainty of prognosis in coronary [illegible]

Subsequently numerous papers appeared on the subject of longevity of patients with angina pectoris or myocardial infarction, or both Zoll, Wessler and Blumgart reported in 1951 that in a group of 177 necropsied cases of angina pectoris the duration of life after the onset of angina ranged from 1 month to 19 years with an average of 4 2 years One-third of the patients were dead within 1 year after the onset of angina, almost half (47 per cent) were dead within 2 years, and the 5-year and 10-year mortality rates were 72 and 92 per cent, respectively

With modern diagnostic methods, mild cases of infarction are now freely identified Because of this latter, the apparent prognosis after infarction has improved Levine (1958) emphasized the fact that published statistics have shown wide variation as to longevity after infarction because some physicians reported their private cases and others reported length of life after infarction from hospital records Other series were from necropsied cases exclusively Hospital cases up to a few years ago were the more ill and longevity was of necessity briefer These statements are borne out by some of the investigations reported

Honey and Truelove (1957) studied the records of 543 patients with myocardial infarction from 1940 to 1954 Of these, 195 died within 8 weeks Among the 348 survivors 60 7 per cent lived 5 years and 32 1 per cent were alive after 10 years At the other extreme McCain, Kline and Gilson in 1950 reported a study from the

TABLE I

SUMMARY OF SURVIVALS IN PATIENTS WITH MYOCARDIAL INFARCTION

Author	*Total number of cases*	*5 year survival*		*10-year survival*		*Per cent of 5 year survivors who lived 10 years*
		Per cent	No	Per cent	No	
Palmer (1937)	167	75	(125)	40	(67)	53 6
Bland and White (1941)	162	49	(79)	31	(50)	63 3
Billings, Kalstone, Spencer, Ball, Meneely (1949)	143	45	(64)	30	(43)	67 2
McCain Kline and Gilson (1950) Necropsy Series	87	7	(6)	0	(0)	—
Smith (1953)	85	66	(56)	20	(17)	30 3
Cole Singian and Katz (1954)	285	67	(191)	44	(125)	65 4
Master (1954)	381	52	(198)	17	(65)	32 8
Weiss (1956)	211	52	(110)	37	(78)	70 9
Feil (1959)	300	67	(202)	31	(93)	46

Age

Under 40 years the influence of age on life expectancy at onset of angina pectoris or a [illegible] is difficult to evaluate The figures of ([illegible]
for 100 cases [illegible]
pared with 2 4 years for 195 patients of all ages In another paper [illegible] and White (1956b) reported the age difference in 456 patients with angina pectoris At onset the groups were between the ages of 36 and 55 years, and 56 years and over A comparison on an actuarial basis showed the relative survival ratio to be the same in the two age groups

In a completed study of 200 patients with myocardial infarction Richards, Bland and White (1956a) concluded that the ultimate outcome indicated that patients having myocardial infarction at an early age have a better chance of long survival [illegible]

(1953) On the other hand Gubner and Ungerleider (1959) reported that among those persons over 60 years of age at the time of their attack, the mortality ratio was approximately half that of those who had their attack of infarction under the age of 50 years

Many young people do well after the onset of angina pectoris or of myocardial infarction, but coronary atherosclerosis occurring in the younger age group appears to be a more rapidly progressive disease than in the older age patients Diabetes mell[illegible] seems to cause progressive and relentless disease [illegible]

[illegible] of 60 years has a life expectancy of 15 5 years [illegible] infarction has the same 10 years expectancy as the man of 40 years (64 per cent of average)

Obesity

[illegible]

obese There were few patients in the underweight or extremely overweight group (Table II)

These cases have been regarded as mild because of the lack of the above systemic reactions and the diagnosis of non transmural infarction The patients have for the most part recovered and frequently the electrocardiographic residua were slight or lacking Cutts Merlino and Easton (1957) showed that these cases are not always mild in their subsequent course In a series of 69 patients admitted to hospital there were 24 deaths of which 14 were known to be due to heart disease, chiefly myocardial infarction Of the cardiac deaths, 7 occurred in the first year of follow-up

THE BALLISTOCARDIOGRAPH

The use of the ballistocardiograph as a prognostic aid has been suggested by Plotz (1957) who, for three years, observed 50 patients with Grade 2 changes or better after a first attack of infarction One patient died of a subsequent infarction and another died of heart failure Mandelbaum and Mandelbaum (1953) reported ballistocardiographic observations on 100 patients for periods of 18 to 24 months In 65 patients ballistocardiographic improvement to Grade 2 or better was recorded Of these patients 55 returned to their gainful or household duties Of the remaining 10, 1 died of a recurrent myocardial infarct, 1 advanced to Grade 3 ballistocardiographic abnormality after recovering from a second myocardial infarct, and the remainder had recurrent attacks of myocardial failure or severe angina At the present time there appears to be no significant advantage in employing the ballistocardiograph to obtain prognostic information that can be secured otherwise

FACTORS INFLUENCING PROGNOSIS

Several factors alter the prognosis of angina pectoris and of myocardial infarction namely, cardiac enlargement, hypertension, congestive heart failure, severe uncontrolled arrhythmias, diabetes mellitus and generalized severe arteriosclerosis (including peripheral vascular disease) Shock, height of temperature, elevation of white blood count, sedimentation rate, elevation of transaminase level, pulmonary infarction, pneumonia, and persistence or recurrence of pain add to the gravity of the prognosis Patients with transmural infarcts have a more difficult time The prognosis within the first two months varies greatly depending on the care given the patient, such as treatment of shock, arrhythmia and heart failure, and the use of anticoagulation Cole, Singian and Katz (1954) had an early mortality of 22 7 per cent Levine and Lown in 1952 reported a mortality of 13 8 per cent in patients treated with anticoagulants and 8 3 per cent in those treated with anticoagulants plus chair rest, all in the same hospital In 1958 Levine reported that the immediate mortality was from 10 to 25 per cent Fifty per cent died in 2 years, 75 per cent in 5 years and the remainder lived for periods up to 25 years Many investigators (Cole, Singian and Katz, 1954, Master and his colleagues, 1954, Richards, Bland and White, 1956a) agreed that complete recovery following infarction increases the likelihood of long life expectancy Figures given by Richards, Bland and White are for 55 patients who had neither angina pectoris nor cardiac failure one month after infarction and returned to their previous work and activities

effusion, and pneumonia .
and all may recur over w
infarction or it may develop
usually pleuropericardial in type but at times it resembles angina A pericardial friction rub is found in the majority of cases Pericardial effusion is a frequent occurrence and the x ray studies may give the impression of cardiac enlargement The pleural effusion may be attributed to cardiac failure although the normal venous pressure and circulation time, and absence of hepatomegaly, should exclude this In rare cases, cardiac failure may occur The complication may recur several times In general, the prognosis is favourable, and the illness is self limited The importance of recognizing this syndrome is obvious for its presence does not appear to influence prognosis

Shoulder–arm syndrome

Following infarction, pain may occur in the left shoulder and arm with limitation of movement The pain at times may simulate that of coronary insufficiency This syndrome usually occurs within four weeks of acute infarction and the symptoms may last for weeks or even months subsiding spontaneously The occurrence of this syndrome does not alter the favourable prognosis

PROGNOSIS FROM AN INSURANCE POINT OF VIEW

It has been traditional for insurance companies to look askance when applicants either give a history of atypical chest pain, of angina pectoris, or of myocardial infarction *In all three groups the companies recognized that the mortality was* increased Gubner and Ungerleider (1959) of the Medical Department of The Equitable Life Assurance Society of The United States have tabulated their calculated risks in coronary heart disease, and they have concluded that, while the long term prognosis is unpredictable there are broad patterns of survival which may be used to determine insurability

ary attack is about six to seven
Thereafter it falls progressively,
ttack the more complete the re-
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years Angina patients have a better prognosis, and females have a better long term survival than males Gubner and Ungerleider found that asymptomatic electrocardiographic abnormalities also have an adverse effect on survival Mortality in people with major T wave abnormalities is approximately three and a half times the normal and in those with minor T wave changes it is twice the norm

and that insurability may be considered at an interval after recovery from the acute attack, when functional recovery is good, and when there are no accompanying abnormalities

TABLE II

STUDY OF WEIGHT IN ARTERIOSCLEROTIC HEART DISEASE

Weight	*Cases*	
	Number	*Per Cent*
1–10 per cent or less underweight	77	26 1
Exactly normal weight	37	12 5
1–19 per cent overweight	136	46 1
20–30 per cent and more overweight	45	15 3

Sex

The preponderance of males with coronary disease and the occurrence of symptoms in older females make it difficult to determine the influence of sex on longevity This factor may account for the decreasing survival rate in women, especially after the 10 year period as pointed out by Richards, Bland and White (1956a)

In opposition to the above data are several authors, namely Boas (1951), Smith (1953), and Woods and Barnes (*1942*) *who found immediate mortality was higher* in females both above and below the age of 60 years

Hypertension

The early mortality of patients with blood pressure over 150/90 mm Hg is not increased In patients who survive for long periods, hypertension is uncommon This reflects the added burden of hypertension and the effect of hypertensive disease on kidneys and brain (Cole, Singian and Katz, 1954, Richards, Bland and White, 1956a and b)

Diabetes mellitus

The frequent association of diabetes mellitus in cases of coronary artery disease is widely recognized The prognosis in this combination of diseases varies considerably Liebow (1959) stated that in a series of 200 cases of infarction in diabetics the mortality in the first two months was similar to that in uncomplicated myocardial infarction On the other hand Bradley and Bryfogle (1956) found a high mort[illegible] *from* [illegible]*cute myocardial infarction (in 60 8 per cent following all attacks*
and
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long
In th[illegible]
in the long term survivors

MISLEADING FACTORS IN PROGNOSIS

Post myocardial infarction syndrome

The recognition of this syndrome by Dressler in 1956 was an important contribution The syndrome *is characterized by prolonged or recurrent fever,* chest pain, pericarditis, with a persistent pericardial friction rub, pleurisy, with or without

death must be considered in relation to jobs involving risk to others which are dependent on the normal functioning of the individual, such jobs as that of bus, lorry and taxi drivers, engine drivers signalmen, who often work alone in a box crane operators, steersmen of ships, aeroplane pilots, structural steel mechanics, and so forth

Perhaps the most striking encouragement to older patients is the continued activity of President Eisenhower after his infarction at the age of 65 years His subsequent career has been an example of ability to withstand continued physical and emotional strain

DISCUSSION

The prognosis of coronary heart disease has changed considerably since the days of Heberden. We now recognize the many patients who survive the attack of infarction *for many years From a study of the literature and from his own experience* the author believes that the following factors influence prognosis

Factors influencing prognosis

Previous attacks—Patients who are experiencing their second or third attack have a more serious outlook

Pain—If the pain lasts longer than 24 hours after the infarction, the prognosis is correspondingly poorer

Shock—Perhaps the most serious of omens is shock In spite of oxygen and the [illegible]

Heart failure—This signifies extensive myocardial injury and few patients survive But the prognosis is not uniformly bad for an occasional patient lives [illegible] comfort [illegible]

if not readily controlled by quinidine or Pronestyl Atrial fibrillation and flutter are serious only if not readily controlled by digitalis

Embolism—This occurs less frequently today with anticoagulant therapy and early ambulation

Electrocardiogram—Favourable aspects of the electrocardiogram are rapid return to normal non transmural infarcts, absence of frequent premature beats, absence of heart block, normal voltage, and normal rates

Obesity—This adds to the gravity of the situation from a long term point of view

Severe hypertension—This decreases life expectancy

Pulmonary disease—Severe emphysema and asthma add to the gravity of prognosis

Cochran of the Lincoln National Life Insurance in 1947 began a trial offering of insurance to individuals with a known history of coronary artery disease The applicants were chosen with the following criteria Onset before 45 years, five years after recovery from infarction, no recurrence of symptoms, normal electrocardiogram at the time of application, gainfully employed, standard risk otherwise After the age of 45 years the requirements were the same except that a 10 year period must have elapsed after recovery In 1955 the waiting period was reduced to one year after recovery at any age of occurrence (Cochran and Buck, 1955)

Robb and Marks (1953) of the Metropolitan Life Insurance Company showed that in a group of men totally disabled by coronary artery disease 7 out of 10 lived 5 years or longer, one half lived 10 years or longer, and about one third 15 years or longer

At the present time many American life insurance companies are insuring people with a history of myocardial infarction Their experience is further evidence of favourable prognosis in many cases

INCREASE IN LIFE EXPECTANCY

Life expectancy is increasing in coronary artery disease for a number of reasons Patients with angina pectoris and myocardial infarction have learned to co-operate They understand how to keep their physical and emotional activities below their level of tolerance and their morale improves They continue as productive members of the community They exercise moderately and participate in normal social activity They are the last to come and the first to go at a party Rest periods in the day are frequently taken If overweight, most patients follow a reducing diet of low fat content Arrhythmias and early cardiac failure are recognized and appropriately treated Anticoagulation, now widely employed during the acute stage of infarction and subsequently, may prevent thrombus formation In the acute phase of myocardial infarction with shock many lives are saved by the use of pressor drugs Mild cases are now recognized

REHABILITATION AND PROGNOSIS

The recent reports of experience at the Work Classification Clinics of the American Heart Association, and notably the Cleveland unit under the direction of H K Hellerstein (Rosenbaum and Belknap, 1959), have confirmed the earlier experience of Goldwater in regard to the employability of the cardiac patient (including those with coronary disease) Through the use of a team consisting basically of a medical social worker, a vocational counsellor, and a cardiologist, about 75 per cent of the patients with coronary disease have been able to return to competitive industry in a great variety of jobs without evidence of harm to the patient, his fellow worker, or employer In follow up studies twice as many subjects either remained the same or improved as those who deteriorated, from both the cardiac and employment viewpoints The wide variety of jobs held by the subjects with heart disease dispels the concept of a specific ' cardiac job Absenteeism of selectively placed patients has been no problem To date, there has been no evidence that the natural course of coronary heart disease has been affected adversely by proper employment However, the imminence of sudden unexpected

death must be considered in relation to jobs involving risk to others which are dependent on the normal functioning of the individual, such jobs as that of bus, *lorry and taxi drivers, engine drivers,* signalmen, who often work alone in a box, crane operators, steersmen of ships, aeroplane pilots, structural steel mechanics, and so forth

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Factors influencing prognosis

Previous attacks —Patients who are experiencing their second or third attack have a more serious outlook

Pain —If the pain lasts longer than 24 hours after the infarction, the prognosis is

tension may be relative, for example, if the patient was previously normotensive then a systolic pressure of 80 to 90 mm. Hg is not shock

Heart failure —This signifies extensive myocardial injury and few patients survive But the prognosis is not uniformly bad for an occasional patient lives many years in comfort

Fever and leukocytosis —If the temperature is high and persistent and if the leukocytosis is over 15,000 cells per cu mm the chances of recovery are less If the transaminase level is high the prognosis is more grave

Diabetes mellitus —This does not add to the gravity of the immediate situation, but the long range prognosis is less favourable due to the progression of atherosclerosis and the probability of death from other arterial disease

Arrhythmias —The most serious complication is that of ventricular tachycardia if not readily controlled by quinidine or Pronestyl Atrial fibrillation and flutter are serious only if not readily controlled by digitalis

Embolism —This occurs less frequently today with anticoagulant therapy and early ambulation

Electrocardiogram —Favourable aspects of the electrocardiogram are rapid return to normal, non transmural infarcts, absence of frequent premature beats, absence of heart block, normal voltage, and normal rates

Obesity —This adds to the gravity of the situation from a long term point of view

Severe hypertension —This decreases life expectancy

Pulmonary disease —Severe emphysema and asthma add to the gravity of prognosis

There is one imponderable factor in determining prognosis, namely, the architecture of the coronary arteries If the coronaries are both well developed and have an equal share of the available blood supply, the patient will stand a better chance of recovery following infarction Cardiac enlargement of considerable degree and cardiac aneurysms are unfavourable features

The findings presaging a favourable long term prognosis are as follows The patient should be of average weight, middle age, have normal pulmonary function, have only a moderate reduction in blood pressure, have little fever and that of short duration, have his pain relieved promptly, be free from arrhythmias and congestive failure, and readily respond to the optimism of the attending physician He should not have had previous infarctions

The prognosis in myocardial infarction cannot be accurately made, some patients apparently making an uneventful recovery die suddenly, others pass through a stormy convalescence but do well It is best not to be too precise in judgment If the patient survives the first year he has a 75 per cent chance of living 5 years, if he lives 5 years and is seemingly well, he has a 64 per cent chance of living 10 years, if then well, he has a slightly less than even chance of living 15 years, and then, if well, he has a 41 per cent chance of surviving 20 years

Causes of death

Since the earliest reports of coronary artery disease, sudden and unexpected death has been emphasized as a frequent occurrence In a recent personal review of 324 cases of myocardial infarction there were sudden deaths in 63 instances This represented 48 per cent of the patients who died In a study of 74 cases of angina pectoris without known infarction there were 6 sudden deaths—35 per cent of the known dead These figures are in agreement with many others in the literature

Most other deaths in patients who had angina pectoris or who recovered from infarction are cardiac The younger group die suddenly and the older group die of congestive cardiac failure or vascular complications The causes of death in 400 cases in the author's experience are summarized in Table III

TABLE III

SUMMARY OF CAUSES OF DEATH IN 400 CASE HISTORIES

	Angina Pectoris	*Myocardial Infarction*
Sudden death	6	57
Heart failure	2	26
Infarction of heart	—	14
Shock	1	6
Cancer	—	6
C V A	2	4
Rupture of heart	—	1
Other causes (non cardiac)	6	17
Total	17	131

CONCLUSION

disease although serious and

have many years of ...
... he may have many happy productive years ahead of ... chance of dying also means a

in each case"

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CHAPTER 16

THE MANAGEMENT OF CORONARY HEART DISEASE

IAN G. W. HILL

IN THIS chapter an attempt is made to deal with those aspects of the management of coronary disease which appear to be either controversial or the subject of recent innovation No attempt has been made to cover the whole management of the patient in all stages of the disease, but attention has been devoted at some length

SHOCK

It is generally recognized that in a patient who has sustained a myocardial infarction, the development of severe shock is a sign of the utmost gravity (Binder and his colleagues, 1955) The mortality among such individuals is universally high (see for example, Honey and Truelove, 1957), and a majority succumb whatever line of

period without further hazard The management of shock in such patients is therefore a matter of the utmost importance

Shock occurring in the particular circumstances of a myocardial infarction presents unusual problems in treatment, differing from those of shock occurring in an individual with an intact myocardium in whom loss of blood or plasma has

particularly liable to occur since commonly the left ventricle carries the brunt of the muscle necrosis and is therefore disproportionately weakened

Pressor agents

Attention has been turned for years to the possibility of raising the blood pressure by administration of pressor substances of one type or another. Adrenaline

has found little favour in view of its known accelerator and augmentor actions, whereby the damaged muscle is flogged to increased rate of beating and force of contraction when it is ill able to sustain such a load At the same time dangerous arrhythmias may be provoked by this hormone, and furthermore its action is fleeting A variety of synthetic pressor agents (Binder and his colleagues, 1955) has been used in place of adrenaline One such agent recently introduced and widely tested is Aramine (Metaraminol)

Aramine

This drug was reported by Weil (1955) to have been used in 16 patients with myocardial infarction of whom 15 showed an initial response, 9 recovered from shock, and 6 (37 5 per cent) survived He gave the drug in dosage of 3 to 5 mg intravenously or in a drip infusion in a concentration of up to 200 mg per L Similarly, Stechel and his colleagues (1956) reported on its use in clinical shock in a large series of patients Among these were 16 patients with myocardial infarction, of whom again 6 (or 38 per cent) survived Their method of administration was by intravenous drip containing 300 mg per L of 5 per cent dextrose solution, given at a rate of 80 to 100 drops per minute The blood pressure was checked every minute for the first 5 or 10 minutes and then readings were taken at 5 minute intervals until the pressure stabilized at the desired level, from then until therapy was completed, blood pressure was checked as required If no response was obtained within 10 minutes, the treatment was switched to noradrenaline In this use of Aramine, the principle, as it were, of titrating the blood pressure against the rate of drip is implicit The method is standard practice also for noradrenaline (*see below*) The drug can be given in this manner over long periods and a patient of Stechel and his colleagues, in fact, received it for 24 days A point noted by these authors and by others has been that when the drug is stopped the pressure may fall progressively over a period of 10 to 15 minutes—a situation which may give rise to alarm It is of interest that these authors stated categorically "No blanket endorsement for the use of Aramine, or any other vaso pressor, in shock due to myocardial infarction is intended "

Noradrenaline

There would appear *prima facie*, to be good grounds for the trial of noradrenaline (l norepinephrine, Levophed arterenol) as opposed to adrenaline in this particular condition Von Euler (1955) reviewing the physiological aspects of noradrenaline in hypotensive states and shock pointed out that this hormone raises both systolic and diastolic blood pressure without increasing the cardiac output, that it produces vasoconstriction in skeletal muscle, that even in large doses it is a coronary vasodilator and that the total oxygen consumption of the body is unchanged by noradrenaline though increased 20–30 per cent by adrenaline Noradrenaline was recommended for cardiogenic shock by Miller and his col leagues (1953) They gave the drug by intravenous drip containing 4 μg per ml (4 ml of 1 1,000 noradrenaline in 1 L of isotonic glucose or saline solution), regulating the rate of flow according to the blood pressure response Of their 9 patients with myocardial infarcts 8 showed excellent pressor responses ', and 5 of the 9 survived It has been used by many individuals since (*see*, for example, Stormer, 1954), but with experience it has become generally appreciated that like

somewhat disappointing in the treatment of

duces striking cardiac arrhythmias They reported further on ... myocardial infarction and severe shock to whom noradrenaline was given by intravenous drip A pressor response was obtained in 10 of the 22 patients and 1 was in fact kept alive for 8 days There were however, no survivors from this group The amount required to produce a pressor response in their cases varied from 0 1 to 1 6 micrograms per kilogram per minute

Conclusion

Personal experience of the various pressor agents in the management of shock in myocardial infarction has been similarly disappointing The writer believes that the efficient administration of oxygen in high concentration is probably more effective and certainly a potentially less dangerous therapeutic measure than intravenous infusion of powerful pressor agents (*see also* the experimental work of Smith and Lawson 1958)

ARRHYTHMIAS IN ACUTE MYOCARDIAL INFARCTION

Sudden death occurs at or immediately following the onset of myocardial infarction in a considerable proportion of cases The exact proportion is uncertain since these patients do not survive long enough to be admitted to hospital and may not even live to be seen by a hastily summoned doctor There is general agreement (Stephenson 1958 Beck Weckesser and Barry 1956) that a considerable proportion of such deaths are due to ventricular fibrillation while others are due to cardiac arrest (Hannon Brainard and Flom 1957) Measures for resuscitation

available (Beck Weckesser and Barry 1956) In the author s experience such measures may well be effective and the patient survive

A number of cases of severe myocardial infarction has occurred recently among young men working on an exposed site on high girders in the north of England

intervention A number of patients have been rescued in this way and they have survived to reach hospital with at least a chance of recovery (Warnock 1960)

In the course of an acute myocardial infarction virtually any type of arrhythmia may develop and they are particularly common in the more severe cases While some cause little upset to the efficiency of the circulation and are transient others constitute a grave and immediate threat to life Among these latter may be classed ventricular paroxysmal tachycardia and other arrhythmias associated with a rapid uncontrolled ventricular rate such as atrial fibrillation or flutter Similarly the occurrence of complete heart block with repeated Adams Stokes attacks is not

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other pressor agents, noradrenaline is somewhat disappointing in the treatment of shock due to myocardial infarction Littler and McKendrick (1957) reported that in dogs and monkeys, while noradrenaline is a most potent pressor agent, it produces striking cardiac arrhythmias They reported further on 22 patients with myocardial infarction and severe shock to whom noradrenaline was given by intravenous drip A pressor response was obtained in 10 of the 22 patients and 1 was, in fact, kept alive for 8 days There were, however, no survivors from this group The amount required to produce a pressor response in their cases varied from 0 1 to 1 6 micrograms per kilogram per minute

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A number of cases of severe myocardial infarction has occurred recently among young men working on an exposed site on high girders in the north of England The high incidence of extreme shock and of bradycardia or cardiac arrest has led the firm to provide first aid stations equipped with rhythmic stimulators (' artificial pacemakers) and defibrillation apparatus Wherever such an incident occurs, the factory doctor has apparatus at hand for attempting resuscitation without surgical intervention A number of patients have been rescued in this way and they have survived to reach hospital, with at least a chance of recovery (Warnock, 1960)

In the course of an acute myocardial infarction virtually any type of arrhythmia may develop and they are particularly common in the more severe cases While some cause little upset to the efficiency of the circulation and are transient, others constitute a grave and immediate threat to life Among these latter may be classed ventricular paroxysmal tachycardia and other arrhythmias associated with a rapid uncontrolled ventricular rate such as atrial fibrillation or flutter Similarly the occurrence of complete heart block with repeated Adams Stokes attacks is not

uncommon in patients with extensive posterior infarction, and also constitutes a threat to life

Ventricular paroxysmal tachycardia and other ventricular tachycardias

In many patients who later develop ventricular paroxysmal tachycardia there is a preceding phase during which numerous ventricular extrasystoles occur, detectable either clinically or on the electrocardiogram There are good grounds for attempting to forestall the development of paroxysmal tachycardia in such patients by administration of quinidine sulphate 0 2 g (3 grains) at 4 hourly intervals throughout the day In patients with established ventricular paroxysmal tachycardia it is imperative to abort the abnormal rhythm at the earliest opportunity Again quinidine is believed to be the drug of choice The decision as to whether it is to be given orally or intravenously should depend on assessment of the urgency in the individual case In the semi conscious shocked patient, possibly in left heart failure or apparently moribund, urgent treatment is required, and for this purpose quinidine intravenously is permissible In the writer s experience, the drug given by intravenous drip in saline solution in a concentration of 50 grains in a pint (approximately 3 g in 500 ml) is safe The administration must be controlled by frequent electrocardiographic recordings so that the drip may be interrupted as soon as normal rhythm is restored Alternatively, procaine amide may be given by the intravenous route in divided doses of 100 mg repeated at short intervals till the desired effect is obtained In less urgent cases it suffices to give quinidine by mouth say 0 2 to 0 3 g every 2 hours In patients in whom atrial fibrillation has occurred with a very high ventricular rate digitalization is necessary, despite the disadvantage that digitalis drugs have an excitor action tending to provoke extrasystolic arrhythmias A nice balance must be struck between the clamant needs of the patient for relief of his excessive tachycardia on the one hand, and the risk of provoking extrasystolic arrhythmias on the other

In the writer s experience, the occurrence of such arrhythmias with extreme tachycardia has led to frequent errors in diagnosis in patients seen in consultation or admitted to hospital They may provoke ischaemic pain so that recurrent attacks of pain in a patient under other adequate treatment should prompt a search for a possible fast ventricular rhythm as the cause Not every patient with recurrent severe or prolonged angina is suffering from extension of his infarction Further, the occurrence of left ventricular failure or of congestive heart failure may be determined by such arrhythmias and the failure may respond dramatically to control of the responsible arrhythmia

ANTICOAGULANT THERAPY—SHORT TERM

Anticoagulants in the management of acute myocardial infarction [illegible]
some 15 [illegible]
decided [illegible]
camps, on the one hand are those who believe that dicoumarol and its allies are efficient rat poisons which have no place in the therapy of myocardial infarction, and on the other hand are those who believe as ardently that to withhold anticoagulant treatment is tantamount to malpractice The truth probably, will lie

somewhere mid way bet veen those extremes The problem is of such complexity and such importance as to merit more detailed analysis

In the first place assessment of the value of any method of any treatment in myocardial infarction is complicated by the wide diversity of severity of attack in individual cases, with corresponding variation in mortality The prognosis is further

les on o

necrose

outcome in any individual case and such additional factors as underlying heart disease the presence of diabetes mellitus widespread arterial disease chronic bronchitis and many other factors further complicate the issue There is too the

mized pattern of the time incidence of death in relation to stage of disease For example Honey and Truelove (1957) found that in their extensive series one third of all the deaths occurred in the first 24 hours and a considerable proportion of the remainder in the next 48 hours It is clear that the length of time elapsing between onset and admission to hospital will be a determining factor in respect of the death rate recorded in any given hospital series since in those series in which a high proportion of the cases are not admitted till the second or third day of illness,

prognosis

Many carefully assessed series controlled in respect of all the variables cited above have been published Reference might be made in this context to the early carefully balanced series of Tulloch and Gilchrist (1950) and of course to the extensive studies of Wright Marple and Beck (1954) In the latter a series of 1 031 patients has been carefully analysed comprising 442 controls without anticoagulant therapy and 589 patients who were given such treatment The results reported are comparable to those in a number of other series published at or about that time representing a mortality in the treated group of 16 per cent and in the control group of 23 per cent Gilchrist and Tulloch (1956) have assembled the reported data from a number of such series totalling in all 936 treated cases and 856 controls the mortal ty in the two groups being respectively 16 6 per cent and 29 2 per cent representing a reduction in mortality in the treated group to 56 5 per cent of that in the controls Such figures speak strongly for an overall and worthwhile reduction in mortality from the adoption of anticoagulant therapy

A somewhat different facet of the subject has been elaborated by Russek and Zohman in a series of papers (1952a and b 1954) in which they discussed the place of anticoagulants as a routine treatment in acute myocardial infarction These authors divided patients with such lesions into two main groups good risk and poor r sk respectively They defined the good risk patient as one with no history of previous myocardial infarction without intractable pain without extreme degree or persistence of shock without significant cardiac enlargement without gallop rhythm without congestive heart failure and without such arrhythmias as atrial fibrillation or flutter ventricular paroxysmal tachycardia and interventricular

block Finally, good risk patients are free from diabetic acidosis or other states predisposing to thrombosis Conversely, the poor-risk patient has one or more of these unfavourable factors Writing in 1954, and combining a series at that date with that reported in 1952, Russek and Zohman have assembled a total of 1,318 cases of myocardial infarction of which 611 (46 per cent) were classified on the day of admission as good-risk cases These comprised 489 cases collected in 1951–52 and 122 further cases collected in 1954 The mortality in the two groups was 3 1 per cent and 4 9 per cent respectively and they believed that of all the deaths, 1 per cent in the first series and 0 8 per cent in the second, could be classed as "preventable" The burden of their thesis is that not every patient with a myocardial infarction stands in need of anticoagulant therapy and they believe, in fact, that only some 30 per cent of all cases require such treatment Their conclusion is quoted verbatim "All the available evidence goes to show that anticoagulants are neither necessary nor desirable in the treatment of patients who sustain their first attack of myocardial infarction and present no unfavourable criteria for recovery at the time of the first examination "

Richards (1958), in a review of the cases of myocardial infarction admitted to one hospital over a 13-year period up to 1956, remarked that the death rate has remained remarkably constant despite the introduction of anticoagulant therapy, and further noted that about one-third of the patients die in hospital in the first few weeks He discussed the reasons for this, and attributed the number of patients in his series dying soon after admission to the fact that more than half the patients were admitted within 24 hours of the onset of symptoms and to the high proportion of bad risk cases in the series The implications of these factors in respect of the possible effectiveness of anticoagulant therapy were discussed Again Honey and Truelove (1957) have reviewed all cases of myocardial infarction admitted to one hospital over a 15-year period They found that one third of all the deaths occurred in the first 24 hours and that the death rate was particularly high, reaching 63 4 per cent, among patients who had signs both of shock and hypotension, again all these deaths were in the first 24 hours They concluded from analysis of their data that the only effect of anticoagulant therapy is to save life by preventing pulmonary embolism

Thrombo-embolic phenomena

The reduction in thrombo embolic phenomena achieved by anticoagulant therapy attracted attention early in the course of experience with these drugs For example, Wright, Marple and Beck (1954) found that the incidence of pulmonary embolism was reduced from 28 per cent in the controls to 8 per cent in their treated series Similarly, Gilchrist and Tulloch (1956) in a series of 248 necropsies (160 control and 88 treated patients) found a reduction in pulmonary embolism from 17 per cent to 3 4 per cent There is no question that this reduction in the incidence of pulmonary infarction is a major factor in the favourable results of anticoagulant treatment The evidence regarding reduced incidence of peripheral arterial embolism and of intraventricular thrombosis is less clear cut A critical review of the whole problem is given in the article by Gilchrist and Tulloch

Summary

If one may venture a summary in such a controversial field of therapeutics one would say that, while there is good evidence of an overall reduction in mortality

...eatment These early deaths, as ... to shock, to heart failure and to arrhythmias, ... dence that anticoagulant

...

poor risk cases of Russek and Zohman ... patient from his state on the ... predict the future course of an individual patient from his state on the ... infarction In his personal experience, an individual who has sustained a minor ... the course of 24 or 48 hours develop a second overwhelming ... may be transformed, in an

...

believes that all patients with myocardial ... contra-indications on other grounds ... anticoagulant therapy unless there are strong contra-indications on other ... peptic ulceration or other bleeding ... indications include a history of peptic ... presence of liver disease with

...

years) remains high despite ... have of course had several previous episodes of infarction.

DRUGS USED IN ANTICOAGULANT THERAPY

It is common usage today to administer heparin by the intravenous route in th... ...agulant effect and at the same time t...
first
give
the
use

...

its brief action, and the need for intravenous ... drugs of the coumarol group is available and u...

... The objections have been on the grounds of its slow ... acceptance The objections have been on the grounds of its slow ... action, its prolonged effect, and its tendency in many people's experience to ... duce rather fluctuating blood prothrombin levels In the early part of the ... decade it was largely supplanted in Britain by ethyl biscoumacetate (Trome... which offere...
after the dr...
longer expe...
wide fluctuations
was displaced by
in Britain today It is fairly stable ...

In occasional patients however, nausea is provoked which may necessitate dis continuing the drug Other preparations in use include Sinthrom (nitro phenyl ethyl 4 oxycoumarin), which is active in a much smaller dosage than phenindione or ethyl biscoumacetate An average dose for induction is 20 mg on the first day and 4–8 mg on the second The therapeutic level is reached in 24 to 48 hours and maintenance is usually achieved with a dose of 2 to 8 mg a day With this drug also however, some patients are difficult to control and unexpected fluctuations in the blood level are found—so called escape phenomena Recovery after dis continuing the drug is complete in 48 to 72 hours and like other members of the series, its action is readily counteracted by the administration of vitamin K_1 (Walker, 1955)

Other analogues which have been used include Marcoumar (3(1 phenyl propyl) 4 oxy coumarin), a long acting substance of considerable potency and Warfarin (Coumadin) (3(alpha acetonyl benzyl) 4 hydroxy coumarin) This latter is a drug of high potency with rapid action which may be given intravenously or orally (Shapiro, 1955) Induction is achieved by a dosage of 1 mg per kg body weight the minimum dose being 50 mg and the maximum 100 mg It is effective in 24 to 48 hours and the action is prolonged up to 5 to 7 days Shapiro (1955) detailed two methods of maintenance either by intermittent administration every four or five days of doses approximately two thirds of the initial dose or by a daily ration of 12 5 mg The actual dosage in either case is governed by the results of prothrom bin time estimation The action is said to be predictable stable and easy to control Vitamin K_1 is an effective antidote

CONTROL OF ANTICOAGULANT THERAPY

The control of heparin dosage is relatively easy since simple estimation of the blood coagulation time suffices as an index of the efficiency of the treatment This is not the case with drugs of the coumarol group

The whole subject of blood coagulation is one of the most complex in haematology as witness the monograph of considerable length by Biggs and Macfarlane (1957) and a cardiologist may be pardoned if he feels completely at sea in this bewildering and unfamiliar field Not only is the field complex but it is the arena even now of active disputation between highly specialized scientists In so far as the control of anticoagu lant drugs is concerned the position might be summarized as follows For a good many

terms of times rather than indices a circumstance dictated by the shape of the curve relating prothrombin concentration to time Of recent years however it has become clear that the coumarol drugs act not only on prothrombin but on some three other factors in the complex coagulation mechanism Factor VII Factor IX (Christmas Factor) and Factor X (Stuart Prower Factor) (Matthews and Walker 1959) It has further been established that the Quick one-stage test measures mainly Factor VII

as introduced such a test using a
) have the merits of simplicity and

ulant therapy

The

ansen, 1951 D
l eve him of th
ntidote to overdosage

IN BED IN MYOCARDIAL INFARCTION

week Such prolonged rest is not universal ... to a considerable number of
has been a tendency to allow increasing liberty to a considerable number of
patients early in the course of the illness Levine and Lown (1951) recommend
nursing critically ill patients in failure in a chair rather than in bed, though liberties

These authors reported 8 patients who did not have adequate rest in bed during the
a ... one reason or another mainly through the infarct not being
Of these 8 patients, 6 died
hors referred to Schlichter,

f or other

MANAGEMENT OF MINOR EPISODES OF ISCHAEMIA

Difficult problems in management arise in the treatment of individuals who have sustained what may be termed a minor episode of ischaemia or "acute coronary insufficiency" By such is meant an attack which, in all but duration, resembles on the one hand angina pectoris, and on the other myocardial infarction The pain is of classical site, nature and radiation but persists longer than a simple attack of angina lasting possibly half an hour yet short of the prolonged duration common in major myocardial infarction, and it is not associated with shock Such attacks

may be repeated two or three times in the course of a few days and may, of course, herald the onset of a major myocardial necrosis In other individuals, however, they may subside to leave the patient either symptom-free or subject to recurrent effort angina The principles of management of such patients depend to a large extent on the views of the individual physician regarding their nature It is clear that in a proportion of patients at least such attacks betoken minute focal infarctions in the heart muscle, due in some cases to thrombosis of twigs of the coronary ramification, and as such they may be followed by a major occlusion of a larger artery In such cases it would be logical to attempt to limit the spread of infarction by preventing further thrombosis, that is by the administration of a rapidly-acting anticoagulant such as heparin Pathologically, however, it is known that a proportion of these patients have sustained minute subintimal haemorrhage in a coronary vessel which may be aggravated by anticoagulants In a considerable proportion of the cases actual occlusion of coronary vessels is not in question, since muscle necrosis may occur with patent coronary vessels when the demands of the myocardium exceed the available oxygen supply

Probably the most important single measure of treatment is rest in bed, and it is recommended that patients who develop episodes of this type should be put to bed and nursed there for at least two weeks The giving or withholding of heparin is a matter for individual judgment In general, coronary vasodilators are of relatively little value in this condition Nitroglycerine may relieve the pain but its action is transient and the long-acting preparations are disappointing In the writer's experience, a proportion of patients who suffer recurrent attacks of this type over a period of weeks while under medical care, die suddenly some of these deaths have occurred in patients who, despite anticoagulants, continued to have recurrent bouts of pain accompanied by minor transient electrocardiographic changes

THE DANGERS OF ANOXIA TO THE PATIENT WITH CORONARY DISEASE

It is generally accepted that the pain in angina is an expression of anoxia of the myocardium, conditioned by an actual narrowing of the nutrient arteries as in coronary atherosclerosis, or on occasion a reflection of increased oxygen demands as in extreme tachycardia, or of inefficient oxygen transport, as for example in profound anaemia

grounds, anoxia is dangerous to the patient with coronary disease It is therefore, not surprising that in such patients from time to time sudden death occurs under conditions of acute anoxia In this respect the induction of general anaesthesia without due regard to the maintenance of adequate blood oxygenation is particularly dangerous This happens inevitably when patients are anaesthetized with gas, as for dental extractions, but even in general anaesthesia for major surgery induction may be associated with acute anoxia and peril to the patient Instances of this type are familiar in the experience of most physicians Patients suffering from coronary disease should be warned that, in the event of dental extraction or other surgical operation under

to detail of maintenance of airway, and so forth, for operations to be carried out under anaesthesia without undue hazard, provided the condition of the patient is known beforehand

THE RISKS OF UNUSUAL STRESS AND STRAIN

John Hunter once remarked that his ' life lay in the hands of any rascal who chose to annoy him ', a statement which was fully borne out by the manner of his demise (Major, 1932) It is the experience of many patients that anginal attacks are readily provoked by anger, fear, or other emotional upset, and the avoidance of such disturbance to their equanimity is as important to them as the avoidance of undue exertion to the majority of anginal subjects Again, the relation of exertion to the production of angina needs no emphasis, since it is implied in our very definition effort angina" Since any anginal attack is potentially dangerous and may lead to sudden death from ventricular fibrillation, the avoidance of attacks by appropriate curtailment of exercise is obligatory for all patients

In this section, however, a risk is considered which is less widely recognized, namely the association of unaccustomed strenuous exertion with subsequent myocardial infarction It has been generally taught for many years that myocardial infarction commonly occurs at night when the patient is at rest in bed and that there is no clear cut effort relationship in this condition So long as it was believed that myocardial infarction was invariably a sequel to coronary thrombosis, it was understandable that the acceptance of exertion as a provoking cause was difficult to achieve We now know that a considerable proportion of infarcts occur without coronary occlusion and are probably the result of an unusual demand for oxygen by the myocardium which diseased vessels are unable, though remaining patent, to supply The possibility of stress as a precipitating factor thus becomes tenable

The practical point is that among the subjects of myocardial infarction there is a proportion in whom the catastrophic episode has been preceded by a short interval by unusual physical or mental stress The author has seen this repeatedly in relatively young men and in cases in whom no question of compensation for work injury could arise for example, in a young company director of 35 years who sustained his attack shortly after felling a tree in his garden, or again in a supervisor who, from force of habit and interest, lent a hand to some workmen fitting [illegible]

[illegible] aged and athero-sclerotic

It is emphasized that for men over 50 years, and for a proportion of men who are out of condition though yet in their 40 s, indulgence in sudden unaccustomed strenuous physical exercise is perilous This applies not only to the individual who is already the subject of angina but applies equally to the man who has had no hint of coronary mischief but who may sustain a major myocardial infarction following a rash act It is the duty of the physician to advise middle aged men in general to avoid such contingencies and in particular those of [illegible]

[illegible] development of coronary disease Exercise which is taken regularly is not extreme, and is maintained over the years as the arterial system ages appears to be a reasonable protection against the development of severe coronary atherosclerosis with all its consequences While advising, therefore,

that sudden strenuous physical exertion of an unwonted type is highly dangerous, younger men should keep up some athletic activity well on into middle-age, and ageing men should be encouraged to take exercise within the limits imposed by their years Walking instead of riding in a car, climbing stairs instead of riding in a lift are reasonable activities for every man and may serve to prevent or defer the onset of coronary symptoms

Where unavoidable exertion has to be undertaken, of a nature known to be liable to produce pain, or where the patient is faced with a situation which may well provoke a stress reaction, as, for example, a board meeting or an after-dinner speech, the prophylactic use of nitroglycerine is of great value In the author's experience, relatively few patients have been advised by their doctors regarding this taking of nitroglycerine as a *preventive* of pain A single tablet of $\frac{1}{100}$ of a grain, chewed or sucked a few minutes before the exercise has to be undertaken or before the stress has to be faced, may prevent an attack which would otherwise be inevitable and will reduce the risk of serious consequences

VASODILATOR DRUGS IN ANGINA PECTORIS

The speedy and effective relief afforded by nitroglycerine in the acute attack of anginal pain is beyond dispute and the drug remains probably the most effective single remedy for treating this condition It has various advantages over the older amyl nitrite In the first place the dose can be more accurately gauged, since with amyl nitrite there is considerable variation in the amount actually inhaled by the individual patient Again, amyl nitrite renders the user conspicuous in public, partly from the snap of the ampoule, partly from the penetrating odour which surrounds him, and lastly from the intense flushing of face with occurs Nitroglycerine, moreover, appears to afford relief in a higher percentage of cases than does amyl nitrite Its outstanding disadvantage is its brevity of action This entails the consumption of a large number of tablets in the course of a day by the individual who suffers from recurrent severe angina, a circumstance which on occasion gives rise to unnecessary alarm in the practitioner The maximum number of tablets permissible in the day is that number which will relieve the patient's pain

Long-acting vasodilator drugs

It is understandable that intensive search has been made for a long acting remedy to obviate this repeated consumption of tablets One such is penta-erythritol tetranitrate (Mycardol) which was introduced in Europe during World War II and came to be widely used in Britain and America in the late 1940s The early reports were favourable (*see*, for example, Balatre, Merlen and Grandjean, 1949, Winsor and Humphreys, 1952, Plotz, 1952, and Perlman, 1952)
example, Talley, Beard and Doherty
Fife, Howitt and Stevenson, 1958, D
lukewarm, and at worst, condemnat
blind well-controlled technique to which reference is made below
An ent

his colleag
these papers

some 40 per cent. Toxic effects were early noted in about two-thirds of the patients and were sufficiently severe to preclude further treatment with the drug in about

Since it is clear that nitroglycerine itself has a significant action, however brief, it would appear logical to attempt to prolong the action of the drug by the form of its prescription. A long-acting preparation of nitroglycerine has, in fact, been prepared (Sustac in Britain, Nitroglyn in the United States of America and else-

membranes enclosing the globules are said to differ so

are said to be m

intended for imn

should be used,

ordinary nitroglycerine. Early reports (for example, Hueber and Wohlrab, 1955) were favourable, but it is likely that the true place of this preparation in the treatment of angina will be assessed more accurately when it has been in use for several years.

MANAGEMENT OF INTRACTABLE ANGINA

Among the sufferers from angina there is an unhappy minority in whom attacks, which may be of great severity, occur at frequent intervals throughout the day and may persist even when the patient is at complete rest in bed. Nocturnal attacks, sometimes two or three in a night, are not uncommon and are in some patients a special feature of their malady. Such frequent attacks occurring *de novo* may, of

course, herald the onset of a major myocardial infarction, but in a proportion of patients attacks of this type occur daily over a period of many weeks or months or even years without the occurrence of a major ischaemic catastrophe These attacks occasion great distress to the victim and their management constitutes a special facet of the treatment of coronary disease The number and variety of treatments suggested is testimony enough to the lack of complete efficacy of any one

Rest in bed

The first point worthy of emphasis is the necessity in every patient with this condition for an initial period of treatment by complete rest in bed for several weeks This *is an essential preliminary* to any drastic intervention by surgical operation or otherwise, since *it* is recognized that in a proportion of individuals the attacks may subside spontaneously after such a period In the author's experience this has happened repeatedly and *it* is clear that had any one of these individuals in whom this happy result occurred been subjected to ablation of the thyroid gland or any variety of surgical nerve section, the operation would have had the credit for what was Nature's cure It is emphasized that the drastic and irreversible methods of treatment discussed below *are to be reserved* for those in whom the physician, after an adequate period of observation and medical treatment, is convinced that no alternative exists These measures are of three t... [illegible] nerve [illegible] *gland* [illegible] able deliberation before embarking on it

Surgical nerve section

The various operations for surgical nerve section need not be detailed here *In brief*, interruption [illegible] the upper four thoracic nerve roots or extirpation o[illegible]ed parts of the sympathetic chain may afford relief i[illegible]cases Where the pain is referred to the right side, as in some 25 per cent of patients, naturally the right side of the vertebral column should be selected for operation An inescapable consequence of stellate ganglionectomy is a Horner s syndrome on that side and this should be explained to the patient before operation In general such operations afford a considerable measure of relief, whether actual section is carried out or whether the nerve roots or ganglia are *injected with alcohol In both* cases there is considerable risk of subsequent neuritic pain from scarring which may be a great burden to the patient and may prove as irksome in the long run as the original angina In the writer s experience, patients who [illegible] all discomfort on exertion, [illegible] l ache or by a feeling of dis- [illegible] nt that he has come to the [illegible] the ' red light" which pre- [illegible] on

Surgery on the heart

Direct surgical attack on the heart has taken various forms Originally attempts were made to revascularize the muscle through anastomoses with pericardial vessels achieved [illegible]

of the coronary sinus

Ablation of the thyroid gland

The third line of attack is indirect The metabolic demands of the patient may be

disease.

The words of a wise and senior cardiologist may well be quoted in conclusion Asked what were the methods available for the treatment of intractable angina, he remarked, methods which the physician would hesitate to apply to himself '

LONG-TERM ANTICOAGULANT THERAPY IN MYOCARDIAL INFARCTION

From the above it will be apparent that there is still some controversy as to the

recurrence of in-farction by such maintained treatment is not new, and in fact has been practised sporadically for a number of years (see for example, Nichol, Phillips and Jenkins, 1954, Tulloch and Wright 1954) There was an early indication (Tudhope and Donald, (1954) that even a short course of anticoagulants during the course of an

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trial over a period of 1 to 10 years The treated and control 200

per

cent

per cent and 34 per cent Bjerkelund's work

prognosis of survivors from an acute myocardial infarction and dealt in some detail with the planning of a controlled investigation of the type he carried out There were 237 patients who were the subjects of this rigorously controlled trial, 119 and 118 in the treated and control

groups respectively. His results, which have been subjected to statistical analysis, showed that the mortality among patients under the age of 60 years is significantly higher in the control than in the treated group during the first 12 months of the observation period He found, however, that over the age of 60 years the difference is not statistically significant and further that after the first 12 months of treatment *there is no certain difference between treated and control groups* either over or under the age of 60 years He found the mortality significantly higher in patients who had had several previous infarcts and that increasing heart size was also an adverse factor He concluded with the paradox "It can, therefore, perhaps be said that while short-term treatment of acute myocardial infarction is primarily indicated in the so-called 'poor-risk' cases, long-term therapy is primarily indicated in the 'good-risk' cases"

The *Medical Research Council trial was carried out simultaneously in some 15* centres all over Britain It was confined to patients between the ages of 40 to 65 years (later extended to 40 to 69 years) of both sexes, who had been treated with anticoagulants during a recent myocardial infarction of which Q wave evidence in the electrocardiogram was deemed essential The patients were allocated in random fashion to two groups receiving low and high dosage respectively The low dosage group acted as controls since they received tablets containing only 1 mg of phen*indione The high dosage group received phenindione in doses to increase the pro*thrombin time as measured by Quick's one-stage test to 2–2½ times the control level The authors reported their results with extreme caution and stated that "although the death rate was higher in the low dosage series, there is just the possibility that the difference could have occurred by chance" They stated further that under the age of 55 years, males on high doses suffered recurrent infarctions at only one fifth of the rate of those on low dosage, and over that age the rate is *halved* by high dosage, these differences being statistically significant The difference in the death rate is most evident in the first six months of the follow-up period but the disparity in the re-infarction rate is maintained for at least two years This report did not pass without criticism (McMichael 1959, Honey and Truelove, *1959) to which the Working Party in due course replied (Medical Research Council* Working Party, 1959b) The final paragraph of this reply may be quoted

of patients who have recovered from an acute phase of myocardial infarction

It is clear that *no* final conclusion can be reached on these results, and particularly since a comparatively small proportion of patients suffering myocardial

of the individual against recurrence of a serious and possibly eventually fatal lesion, and from the angle of community and hospital services *If* anticoagulant treatment on a long term basis for this condition is to become general, there will [illegible] be vastly increased demands for laboratory control of prothrombin

myocardial infarction is recurrence of infarction, and in a proportion of cases at least pathological evidence would point to coronary occlusion from thrombus as the cause

MEASURES TO REDUCE BLOOD CHOLESTEROL LEVELS

incidence of myocardia
(Katz, Stamler and Pick
case of individual, partic
doubt that this correlation of high blood
cardial infarction is real, but there is so far no proof that the relationship is more than coincidental, or that the high blood cholesterol level is causally related to the
It is possible that the high blood cholesterol

but he remains sceptical as to whether such reduction, if achieved, will necessarily be followed by a decreased liability to occurrence or progression of coronary vascular disorder.

various lines, for example, by reduction of the exogenous intake, by interference with the absorption of cholesterol from the gut, by attack at one point or other of the com-

Reduction of cholesterol intake

Certain foods are rich in cholesterol and by reduction of such foods in the diet, the blood cholesterol level may be reduced, though there is good evidence (Keys, 1952) that the cholesterol content of the diet *per se* plays a minor role in controlling the blood level It is well established, moreover (Gertler and his colleagues, 1954), that any reduction is transient, and that while the low intake is maintained the blood cholesterol level creeps back in the course of a few weeks to the pre dietary level and there remains It would appear that simple reduction of intake of this type is unrewarding in the long-term management of patients It is also clear that the form in which the cholesterol is ingested has a considerable bearing on the resultant blood level, and certain foods, especially egg yolks and animal fats, particularly from the ruminant, have a blood cholesterol-raising effect, but while it would seem reasonable to limit the consumption of such substances, there is certainly no justification for drastic phobias regarding cholesterol-rich foods

Blocking of absorption of cholesterol

The blocking of absorption of cholesterol has been attempted by the administration of sitosterols (Council on Pharmacy and Chemistry, 1956), closely allied sterols, differing only in an odd methyl or ethyl group in the side-chain from cholesterol, which have the property of reducing absorption of cholesterol from the gut The reports as to their efficacy are conflicting (Pollak, 1953, Boyle and his colleagues 1953, Wilkinson and his colleagues 1953, Joyner and Kud, 1955, Ahrens and his colleagues, 1957) and so far these substances have found little place in practical therapeutics, which is understandable in view of the minor importance of exogenous cholesterol

Interference with biosynthesis of cholesterol

Interference with the biosynthesis of cholesterol is theoretically possible at any one of numerous points in the long series of steps in its manufacture in the body A recently-introduced preparation which has an effect on the biosynthesis of cholesterol in the liver is Triparanol (Blohm and his colleagues, 1959, Hollander and Chobanian, 1959, Oaks, Lisan and Moyer, 1959) There is evidence that this substance given orally in doses of 250–1 000 mg daily produces a fall in the serum cholesterol and, so far as is known at present has no adverse effect on other body processes There is evidence that the total body cholesterol is reduced and that the fall in the serum level is a reflection of reduced biosynthesis This substance, however, is still under investigation and is not in routine use

Hormone administration

A wide variety of hormones are known to have an effect on blood lipids (Oliver and Boyd, 1956a and b, Adlersberg, 1957) Among these ACTH, cortisone and deoxycortone, thyroxin and its congeners, tri iodothyronine and tri-iodothyroacetic acid, have considerable effects All these substances reduce the serum cholesterol, the cholesterol phospholipid ratio and the β lipoprotein fraction, but their use is limited or precluded by their other actions For example, the administration of thyroxine and tri-iodothyronine results in general metabolic stimulation and increased demands upon the heart which are inimical to the subjects of angina

Tri iodothyroacetic acid (Oliver and Boyd, 1957), though more promising, is likewise of no value in long term treatment, although initially effects on the blood cholesterol are produced by doses which are without effect on the metabolism, a tolerance is rapidly acquired and the dose has continually to be increased to maintain the cholesterol lowering effect, with the result that doses producing ordinary thyroid hormone effects are soon attained Furthermore, even with small doses the frequency of anginal attacks is increased.

Of the various hormones, those with the most promising action are the female sex hormones, both of the naturally occurring group (oestradiol, oestrone, oestriol) and the synthetic analogues (ethinyl oestradiol, and hexoestrol) A review of the place of these drugs in therapy is given by Oliver (1958) together with the results of treatment in a series of 50 patients matched against a control series of similar size to whom inert tablets were given Over a 2½ year period ethinyl oestradiol caused maintained reduction in serum cholesterol and in cholesterol phospholipid ratio but there was no significant difference in morbidity and mortality in treated and control groups

By and large, while there is some evidence that long term administration of these hormones can achieve some reduction in the abnormality of the blood chemistry and possibly in the risk to the patient of recurrent coronary episodes, the feminizing side effects are so untoward that few men have the fortitude to maintain the treatment over prolonged periods The search goes on for analogues of these hormones which will preserve the effects on blood cholesterol and other lipids without the effects on metabolism in general, or specifically on cardiac metabolism, which are features of the naturally occurring hormones For example, some analogue of tri iodothyronine or tri iodothyroacetic acid may yet be found which will affect the blood chemistry without stimulating the heart muscle to excess activity or raising the metabolic demands of the body as a whole Similarly, there may yet be found some steroid devoid of feminizing effects which will preserve the influence on blood chemistry shown in such striking degree by the oestrogens today

Other methods

Two methods of reducing the blood cholesterol level the mode of action of each being unknown remain to be discussed These are the administration of unsaturated fats in the diet and the administration of nicotinic acid in high dosage

Administration of unsaturated fats in the diet

In the chapter on Aetiology (*see* Chapter 12) reference was made to the observed fact that administration of highly unsaturated fatty acids (linoleic, linolenic and arachidonic acids) with 2 3 and 4 double bonds respectively can reduce serum cholesterol levels when substituted for saturated fats in the diet (Kinsell and his colleagues 1952 1953, Bronte Stewart and his colleagues, 1956, Ahrens and his colleagues 1957) These fats are in general of vegetable origin though certain fish oils (pilchard and sardine oil) are equally effective It has been shown that addition of such unsaturated fat to the diet will cause a fall in blood cholesterol despite the dietary intake of unsaturated fat remaining unchanged (Gordon, 1959) The effects are in general more striking and more reliable than those produced by a simple reduction of total fat intake This observed fact has been the basis for the

introduction to the world markets of a great range of products containing unsaturated vegetable fats Widely advertised in the lay press, these are sold under various names and consist, for the most part, of corn (maize) oil or similar products (corn oil contains some 57 per cent of linoleic acid) It is claimed that by ingestion of some 50 grammes daily of such a preparation, a considerable and lasting reduction of blood cholesterol may be achieved A reduction in the intake of saturated fats can be simultaneously achieved by substitution of the unsaturated fat for ordinary fat, not only in place of butter and cheese but for salad oil and in cooking, preparations being available for use in frying

The vigour with which the claims for these various products are pushed by modern high pressure advertising contrasts strongly with the cautious attitude of the scientific workers most eminent in the field For example, Ahrens and his colleagues (1957) stated "It is our present conclusion that recommendations for radical changes in food habits, even by those populations most seriously threatened by atherosclerosis, should await a clearer definition of the specific food factors which control serum lipid levels It is entirely possible that an understanding of the mechanism evoked by these factors will lead to practical measures for control of serum lipid concentration" Again, Keys (1952), whose work in this field is widely recognized, gave a simple set of rules which he believed would meet the dietetic requirements so far as they were known at the time of writing These were (1) avoidance of obesity, with restriction of body weight to that considered standard for the height at the age of 25 years, (2) avoidance of periodic gorging and even temporary large calorie excesses, (3) reduction of all fats to the point where total extractable fat in the diet was not over 20 to 30 per cent of total calories, (4) disregard of cholesterol intake except possibly to restriction to less than one gramme per week

Administration of nicotinic acid

Finally, there is evidence that the administration of nicotinic acid in high dosage is followed by reduction in blood cholesterol levels This was reported first in animals (Altschul, Hoffer and Stephen, 1955, Altschul, 1956) and has been confirmed in man (Parsons and his colleagues, 1956, Parsons and Flinn, 1957, Achor and his colleagues, 1957) In the first clinical paper the authors reported 13 cases observed over a 12-week period or more, all of whom had a cholesterol level above 250 mg per 100 ml of blood in the control period The diet was kept constant as before the test, the sole difference being that during the period of observation, nicotinic acid was given in a dosage of 3 g. daily, in divided doses of 500 mg Such high dosage was accompanied by side reactions which however diminished after the first few days Of the 13 patients, 9 responded to the treatment The authors noted that familial cases of hypercholesterolaemia are refractory Achor and his colleagues (1957) treated 45 patients for periods up to two years using doses of 1 5–6 g per day The majority showed a good and sustained fall in cholesterol level especially in women There was wide case-to case variation and xanthoma tuberosa cases were less favourable No harmful effects were noted

Conclusion

Implicit in all these methods of attempted reduction of blood cholesterol level are two dangers first, that patient and doctor alike should be misled into believing

that reduction of this substance in the blood stream will necessarily effect an improvement in the clinical condition and constitute a safeguard against extension of coronary disease, a matter which is by no means proved, and secondly, there is a very real danger that the patient and doctor may become obsessed by figures for the blood cholesterol to the neglect of other equally important facets of the management of coronary disease It should be emphasized that the physician is concerned with the management of the patient as a whole and not with regulation of a single facet of his blood chemistry

In the present state of knowledge the soundest advice for the atherosclerotic patient is to lead a life of moderation in matters of diet as in activity· avoidance of, or reduction in, obesity, avoidance of large, particularly fatty, meals, and avoidance of strenuous exercise immediately after eating

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introduction to the world markets of a great range of products containing unsaturated vegetable fats Widely advertised in the lay press, these are sold under various names and consist, for the most part, of corn (maize) oil or similar products (corn oil contains some 57 per cent of linoleic acid) It is claimed that by ingestion of some 50 grammes daily of such a preparation, a considerable and lasting reduction of blood cholesterol may be achieved A reduction in the intake of saturated fats can be simultaneously achieved by substitution of the unsaturated fat for ordinary fat, not only in place of butter and cheese but for salad oil and in cooking preparations being available for use in frying

The vigour with which the claims for these various products are pushed by modern high pressure advertising contrasts strongly with the cautious attitude of the scientific workers most eminent in the field For example, Ahrens and his colleagues (1957) stated "It is our present conclusion that recommendations for radical changes in food habits, even by those populations most seriously threatened by atherosclerosis, should await a clearer definition of the specific food factors which control serum lipid levels It is entirely possible that an understanding of the mechanism evoked by these factors will lead to practical measures for control of serum lipid concentration" Again, Keys (1952), whose work in this field is widely recognized, gave a simple set of rules which he believed would meet the dietetic requirements so far as they were known at the time of writing These were (1) avoidance of obesity, with restriction of body weight to that considered standard for the height at the age of 25 years, (2) avoidance of periodic gorging and even temporary large calorie excesses, (3) reduction of all fats to the point where total extractable fat in the diet was not over 20 to 30 per cent of total calories, (4) disregard of cholesterol intake except possibly to restriction to less than one gramme per week

Administration of nicotinic acid

Finally there is evidence that the administration of nicotinic acid in high dosage is followed by reduction in blood cholesterol levels This was reported first in animals (Altschul, Hoffer and Stephen, 1955, Altschul 1956) and has been confirmed in man (Parsons and his colleagues, 1956, Parsons and Flinn, 1957, Achor and his colleagues 1957) In the first clinical paper the authors reported 13 cases observed over a 12 week period or more all of whom had a cholesterol level above 250 mg per 100 ml of blood in the control period The diet was kept constant as before the test, the sole difference being that during the period of observation, nicotinic acid was given in a dosage of 3 g daily in divided doses of 500 mg Such high dosage was accompanied by side reactions which however diminished after the first few days Of the 13 patients, 9 responded to the treatment The authors noted that familial cases of hypercholesterolaemia are refractory Achor and his colleagues (1957) treated 45 patients for periods up to two years using doses of 1 5–6 g per day The majority showed a good and sustained fall in cholesterol level especially in women There was wide case to case variation and xanthoma tuberosa cases were less favourable No harmful effects were noted

Conclusion

Implicit in all these methods of attempted reduction of blood cholesterol level are two dangers first, that patient and doctor alike should be misled into believing

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